

Jorge A. Lopez

Curriculum Vitae

CONTACT

- 10659 Vista Lomas, El Paso, TX 79935.
- Tel. 915-590-6166 (home), 915-747-7528 (Office at The University of Texas at El Paso).
- E-mail: jorgelopez@utep.edu; jorgelopezgallardo@hotmail.com
- Web sites: <http://wiki.utep.edu/display/~jorgelopez/Activities>

BACKGROUND

- BS and MS degrees in physics from the University of Texas at El Paso and a Ph.D. from Texas A&M University
- Postdoctoral experience at the Niels Bohr Institute and Lawrence Berkeley Lab.
- Academic experience for over 20 years, mostly at the University of Texas at El Paso, as professor at all levels.

ACADEMIC SERVICE

- Served as the Chair of the Physics Department from 6/2001 to 12/2008.
- Served as Assistant Dean of the College of Science from 1999 to 2001.
- Has been in countless academic committees and leadership positions, such as graduate advisor, coordinator of the Masters in Science in Interdisciplinary Studies, coordinator of the Distance-Learning MS Physics Program, organizer of the Physics Summer Research Program, Chair of Tenure of Promotion at Departmental and College level, etc.

PROFESSIONAL SERVICE

- Member of The American Physical Society, National Society of Hispanic Physicists, Sociedad Mexicana de Física, Academia Mexicana de Ciencia, and others.
- Has served in numerous boards and committees for The American Association of Physics Teachers, National Society of Hispanic Physicists, Society for the Advancement of Chicanos and Native Americans, Society of Mexican American Engineers and Scientists, as well as many Federal Agencies, such as NSF, NASA, etc.
- Reviewer for professional journals such as the Physical Review, Rev. Mex. Fisica, and others, for Standardized exams such as the GRE, College Board Advanced Placement, College Board's College Level Examination (CLEP) Program, and for publishing companies such as McGraw Hill, 2011, Cummings, John Wiley and Sons., Wm. C. Brown Publisher, Centgage, and others.
- Advisor for Universidad Catolica de la Santisima Concepcion (Chile), Texas A&M - Commerce, Universidad Playa Ancha (Chile), University of Texas at Brownsville, Universidad Autónoma de Cd. Juárez (Mexico), Universidad Catolica del Norte (Antofagasta, Chile), among others.

OUTREACH

- National leader, cofounder of the National Society of Hispanic Physicists.
- Dozens of interviews in radio, TV and newspapers, dozens of general audience presentations, dozens of general audience publications
- Has participated and organized close to one hundred outreach activities.

TEACHING

- Has taught 23 different physics courses at all levels.
- Has directed thesis work of one Ph.D. student, 31 MS students and 7 BS students and has supervised 37 undergraduate students in research projects.
- Has been a member in close to 50 MS and Ph.D. thesis committees.
- Has developed dozens of items for course curricula improvement and teaching material.

RESEARCH

- Specializes in nuclear physics, materials, science education and other areas including the social sciences.
- Has written and edited several books, and written chapters in books, over 100 articles in journal publications and conference proceedings, as well as 14 in electronic journals and unpublished articles.
- Has delivered close to 100 presentations in national and international meetings and other close to 100 talks in seminars and colloquia.
- Has organized about one dozen of national, regional and local conferences, has chaired dozens of sessions in conferences, and is and has been a member of about 20 international advisory boards of conferences and symposia.

GRANTS AND CONTRACTS

- Dr. Lopez has been the PI and co-PI in 106 grant proposals for research, education and outreach activities.
- Has been a PI or co-PI in a total of 42 grants funded for over 4 million dollars.

AWARDS AND HONORS

- Fellow of the American Physical Society (APS) 2007, 2018 Mentoring Award from NATURE, 2018 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, 2016 UT Regents' Outstanding Teaching Award, 2015 Bouchet Award of the APS, 2014 Mentoring Award of the Division of Nuclear Physics of the APS, 2009 Hyer Award of the Texas Section of APS, MAES

2010 Outstanding MAESTro Award, SHPE 2011 Educator of the year, Rho-Sigma-Tau Schumaker Professor by UTEP, Centennial Speaker by the APS (1999-2001).

- Has received 19 awards for research and education.
- Dr. Lopez's students have received close to 20 awards and honors while being under his supervision.
- Inducted into the Mexican Academy of Sciences as *Corresponding Member* in 2012, and in 2018 into the Academy of Distinguished Former Students of Texas A&M University, College Station.

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BACKGROUND

Dr. Lopez grew up in the El Paso/Juarez area in the US/Mexico border. While he and his family opted to live in Juarez, his family worked for over 30 years at a Levi Strauss plant in El Paso (sewing jeans you probably wore if you are over 40). After completing basic education in Juarez, he earned BS and MS degrees at the University of Texas at El Paso, continuing afterwards at Texas A&M University for Ph.D. studies. Graduating in 1986 with highest honors and earning the Best Thesis Award, he went to the prestigious Niels Bohr Institute and Lawrence Berkeley Lab for postdoctoral stays. After a brief stint at CalPoly in San Luis Obispo, he returned to his alma mater in 1990 where he has been Assistant, Associate, Professor and $\rho\sigma\tau$ -Schumaker Professor, as well as Associate Dean and Department Chair.

EDUCATION

- B.S. Physics, 5/1977, University of Texas at El Paso, El Paso, Texas, UTEP scholarship "Good Neighbor", awarded from September 1975 to May 1977.
- M.S. Physics, 8/1979, University of Texas at El Paso, El Paso, Texas, thesis advisor: Dr. E. A. Dean, thesis: "Elastic constants of polycrystalline ceramics", 8/1979
- Ph.D. Physics, Texas A&M University, College Station, Texas, Physics, Ph.D., dissertation advisor: Dr. P. Siemens, dissertation: "The quark gluon plasma in linear response", graduate scholarship awarded by Conacyt-Mexico from September 1980 to May 1983.

GRADUATE APPOINTMENTS

- Cyclotron Institute, Texas A&M University, Texas, Graduate Research Assistant, 1981-1985.
- Physics Department, Texas A&M University, Teaching Assistant, 1979-1981.
- Physics Department, University of Texas at El Paso, Teaching Assistant, 1977- 1979.

POSTDOCTORAL APPOINTMENTS

- The Niels Bohr Institute, University of Copenhagen, Copenhagen, Denmark, Physics, supervisor: Dr. Jakob Bondorf, from 10/1985-8/1987.
- Lawrence Berkeley National Lab., Nuclear Theory, Nuclear Science Division, Berkeley, California, supervisor: Dr. Jørgen Randrup, 9/1987-8/1989.

ACADEMIC APPOINTMENTS

- Assistant Professor, Physics Department, CalPoly State University, 1989-1990.
- Assistant Professor, Physics Department, Univ. of Texas at El Paso, 1990-1993.
- Associate Professor, Physics Department, Univ. of Texas at El Paso, 1994-2000.
- Professor, Physics Department, Univ. of Texas at El Paso, from 9/2000-present.

ACADEMIC SERVICE

Dr. Lopez has been Chair of the Department of Physics and Associate Dean of the College of Science of the University of Texas at El Paso. He was responsible for reconstructing the Physics Department hiring 11 new faculty in a short period of time (2001-2005), played key roles in establishing bridge positions with national labs and observatories, increasing substantially the number of Hispanic and female faculty, and diversifying the Department into new research areas such as astronomy and medical physics, among other achievements.

SYNERGISTIC ACTIVITIES

- Reconstruction of UTEP's Physics Department, from 2001 to 2005, hiring 11 new faculty.
- Support of the creation of the interdisciplinary Ph.D. program in Computational Science with the Dept. of Mathematical Sciences and other departments from the College of Engineering.
- Creator of the Distance-Learning MS program with UT Brownsville to support an MS program in Brownsville.
- Increased Hispanic faculty in the Physics Department from three to six during his Chairmanship.
- Increased female faculty in the Physics Department from one to four during his Chairmanship.
- Played principal role in obtaining bridge positions supported at 50% from The Jefferson National Lab and McDonald Observatory both at The University of Texas at El Paso and at New Mexico State University; Drs. Phil Cole and Verne Smith were supported for five years each, and they both created new research areas and maintained strong connections with a national labs and an observatory.
- Help enlarge the service to education majors from 100 students per semester to 400.
- Established physical science labs in 8 elementary schools in El Paso to teach education majors.
- Obtained funds to initiate growth in the area of Health/Medical physics.
- Increased graduate enrollment through targeted recruitment techniques.
- Brought renowned scientists to campus, including Nobel Prize winners, Leon Lederman and Murray Gell-Mann, and physics stars such as Howard Georgi and Kip Thorne.
- Organized the Fall meeting of the Texas Section of the American Physical Society to El Paso in 1998 and supported bringing it again in 2008.

ADMINISTRATIVE POSITIONS

- Chair, Physics Department, University of Texas at El Paso, 2001 to 2008.
- Assistant Dean, College of Science, University of Texas at El Paso, 1999 to 2001, in charge of:
 - Academic Programs
 - MS in Interdisciplinary Studies
 - Tenure and promotion
 - College course curricula
 - Undergrad. Curriculum Committee
 - Web development
 - College Advisory Board
 - College course catalog
 - Recruitment and Admissions
 - Faculty search committees

- Whatever else was needed.

DEPARTMENTAL SERVICE

- Creator, Dr. Clarence H. Cooper Scholarship, through \$25,000 of donations. 2015 – 8/2018.
- Chair, Search Committee for position in Computational Materials Physics, Fall 2017 - Spring 2018.
- Chair, Committee on Schedules Reviews, 2016-2018.
- Chair of Tenure and Promotion Committee, 2014-2017.
- Recruitment trips to Mexico: Zacatecas (Nov./2016), Puebla (Apr./2016), Hermosillo (Mar./2016), Guadalajara (Feb./2016).
- Graduate Advisor, Physics Department, 2001 to 2007.
- Coordinator, Masters in Science in Interdisciplinary Studies, 2000 to 2001.
- Coordinator, Distance-Learning M.S. Physics Program with UT Brownsville, 1998-2002.
- Physics Liaison, NASA Network Resource and Training Sites grant. 1995-1997.
- Organizer, Physics Summer Research Program, with 16 participants, 1995.
- Advisor, Society of Physics Students, 1993-1997
- Participant, AMP Summer Bridge Program, Summer 1995.
- Search Committee for CEBAF position, 1995 to 1997.
- Advisor of UTEP's Society of Physics Students, 1993-1995.
- Representative of the Physics Department to the Library, 1993-1995.

UNIVERSITY COMMITTEES

- Reviewer of ROTA applications at the University level, 2018, 2019, 2021.
- Reviewer of the Distinguished Alumni and Gold Nugget applications at the College level, Feb. 22 – March 8, 2019.
- Reviewer of SCORE applications for College of Science, Apr. 2 – 8, 2018.
- Reviewer of applications for internal competition of NSF-MRI program, Oct. 10, 2017.
- Reviewer of SURPASS applications for COURI office, 24/Mar./2017.
- Reviewer of the applications for the Regent's Outstanding Teaching Award, Nov. 10 - 18, 2016.
- Hearing Officer, UTEP Student Conduct Committee, 2015-2018.
- Tutor Supervisor for PHYS 1403-1404, UTEP Tutoring Center, 6/2014-5/2015.
- SOCSACS of College of Science, 2013-2015
- Task Force on UTEP's Global Reach, 2012-2013, and 2014-5/15/2015.
- Teaching Effectiveness Committee, 2010-2013.
- Search Committee Computational Science Faculty Position, College of Science, 08-09.
- Credit Transfer Workgroup, "Building International Higher Education on the U.S.-Mexico Border", 04-05.
- Tenure and Promotion Committee, College of Science, 2004-2006
- Tenure and Promotion Committee, Coll. of Ed., 2004.
- Office of International Programs, 1999.
- Search Committee for Chair of Physics Dept., 1999.
- VPRSP Search Advisory Committee, 97-98.
- UTEP Legacy Campaign, 1997.
- Faculty Senate Research Committee, 96-99.
- Provost/VPAA Search Comm., 95-96

- College Science Freshman Orientation Comm, 1995.
- Self-Study Physics Committee, 1995.
- Health Professions Advisory Comm., 1995.
- Self-Study Advisory Committee, 1994-1996.
- Faculty Senate Library Committee, 1994 to 1995.
- Search Committee, Health Physics position, 94-95.
- Local Organizing Committee, 1995 SACNAS Conf.
- SACS Advisory Committee, 1994-1995.
- SACS Library Committee, 1994-1995.
- UTEP Self-Study Steering Committee, 94-96.
- Self-Study Library & Learning Resources, 94-96.
- 1995 SACNAS Conference, Local Organizing Committee.
- Model Institution of Excellence: Coordinating Group, 1994-1995, Advisory Committee, 94-95, Physics Committee, 1994, Task Force 6.
- "Solar Trek", College of Science, 1994.
- Faculty Senate Library Comm., 1993-1995.
- Member, Search Committee for NMSU's Nuclear Physics position, Physics Department of New Mexico State University and CEBAF, 1995.
- Member, Search Committee for Nuclear Physics position, Physics Dept., New Mexico State Univ. and CEBAF, 1994.
- Member, Local Organizing Committee of the Second SC-Cosmic Student Conference on Computational Sciences and Engineering, funded by NSF's Center for research on Parallel Computation, El Paso, 11/25-27, 1996.
- Participant, "Block II Perceptions from the Field Experiment at Marian Manor Elementary School", UTEP's PETE program, El Paso, TX, 11/10/2000.
- Participant, Science Education and Scientific Literacy Conference, Office of Science and technology Policy. UTEP, May 4, 1995.

PROFESSIONAL SERVICE

Dr. Lopez is a member of several professional organizations and has occupied leadership positions in The American Physical Society (Chair, Committee on Minorities), The Texas Section of APS (Chair), The National Society of Hispanic Physicists (Founder and President) and the Society of Hispanic Professional Engineers. He also has served on numerous boards and committees for The National Science Foundation, NASA and other national agencies, scientific journals, publishers, etc. He has also served institutions such as Universidad Católica de Concepción (Chile), Texas A&M Commerce, University of Texas at Brownsville, University of Texas at San Antonio, Universidad Autónoma de Cd. Juárez (México), and others.

SYNERGISTIC ACTIVITIES

- With funding from the Sloan foundation and in collaboration with Drs. David Ernst (Vanderbilt U.) and Carlos Ordoñez (U. Houston) Dr. Lopez created the National Society of Hispanic Physicists (NSHP) in 1995. While acting as its President, Lopez piggybacked the national NSHP meetings with those of the Texas Section of The American Physical Society to gain strength and members. Now standing on its own –and with over 400 members strong— NSHP received \$500,000 from The National Science Foundation to organize the 2011 national meeting in conjunction with the National Society of Black Physicists. For more information see <http://www.hispanicphysicists.org/board/>.
- Participated with Dr. Javier Herrera to create the Engineering Physics career at the Universidad Autonoma de Cd. Juarez (Mexico). From 1994 to 1996 Dr. Lopez helped in the design of the curricula, cooperative programs with UTEP and invited renowned Mexican and international physicists to visit and advise the new faculty.
- While acting as Chair of the Committee on Minorities (COM) of the American Physical Society, Dr. Lopez helped develop the nascent Minority Speaker Program and the COM's Climate for Minorities Site Visit Program to help organizations improve the climate that minorities in physics sometimes experience.

MEMBERSHIPS

- American Physical Society
- Texas Section of American Physical Society
- National Society of Hispanic Physicists
- Academia Mexicana de Ciencias
- Sociedad Mexicana de Fisica
- Society of Hispanic Professional Engineers.
- Mexican American Engineers and Scientists
- Association of Latin American Nuclear Physics and Applications (ALAFNA)

LEADERSHIP

American Physical Society

- Fellow, since 2007.
- Member, Education Committee, Division of Nuclear Physics, 7/7/2021-6/31/2023.
- Member, Nominating Committee, Division of Nuclear Physics, 19/May/2021-15/Aug./2021.
- Member, Nominating Committee, Forum of International Physics, 9/May/2018-15/Aug./2019.
- Chair and Vice Chair, Selection Committee of the Jonathan Reichert and Barbara Wolff-Reichert Award for Excellence in Advanced Laboratory Instruction, 2015-2017.
- Member, Edward A. Bouchet Award Selection Committee, 4/2015-3/2016.
- Member, Excellence in Physics Education Award Selection Committee, 4/2015-3/2016.
- Member, Education Committee of the Div. of Nuclear Physics, 4/2015-3/2018
- Member, 2015 Mentoring Award Selection Committee, APS Div. of Nuclear Physics, 3/2015-3/2016
- Member-at-Large, Forum on Education, American Physical Society, 26/Feb./2014-28/Feb./2017.
- Member, Sub-Committee on Under-Represented Minority Nominations, Committee on Minorities, American Physical Society, 2014-2015.
- Member, Task Force on Diversity in Fellowship, Prizes and Awards, 2014-2015.
- Member, Advisory Committee for the Physics and Astronomy New Faculty Workshops, Am. Assoc. of Physics Teachers, the Am. Astronomical Soc. and the American Physical Society, 2009.
- Member, Executive Committee, Forum on International Physics, 2001–2004.
- Member, Forum of International Physics, 2002-2005.
- Member, Committee of Minorities, from 1/92 to 12/94. Participant of the meetings of 3/92 (Indianapolis), 4/92 (New York), 3/93, 5/93, 10/93, 3/94, 10/94.
- Member, Visiting Committee to U. of Pittsburg, Comm. Minorities, 3/30-31, 1998.
- Past Chair, Committee of Minorities, from 1/95 to 12/95.
- Participant, Workshop on Systemic Reform, Am. Physical Soc., Jan. 9 -12, 1995, Bethesda, MD.
- Member, Visiting Team to NMSU's Physics Department, Committee on Minorities, Feb. 27-28, 1995.
- Chair, Committee of Minorities, from 1/94 to 12/94. Chair of the meetings of 3/94 and 10/94. Host of COM receptions at the 3/94 and 4/94 meetings of APS.

Texas Section of the American Physical Society

- Member-at-Large, elected by vote, 2014-2017.
- Past Chair, 3/2003-3/2004.
- Chair, 3/2002-3/2003.
- Vice Chair, 2000 to 2001.
- Member, Executive Board, 1998-2000.
- Organizer, 1998 Meeting, UTEP 10/1998.
- APS Council Representative, Nominating Committee of the Executive Committee, Arlington, Texas, October 10, 1996.

National Society of Hispanic Physicists

- Session co-Chair, NSHP-APS COM Meetup, at APS April Meeting, Baltimore, MD, Apr. 12, 2015.

- Session Chair, Panelist, Chair of Marketing Committee and member of Conference Executive Committee, 2011 Joint Meeting NSHP-NSBP, Sept. 21-23, 2011, Austin, TX.
- Panelist, panel "Getting into and staying in graduate school", organized by the national Society of Hispanic Physicists, in the 2008 Joint Fall Meeting of the Texas and Four Corners Sections of APS, AAPT, and Zones 13 and 16 of SPS, and NSHP and NSBP, El Paso, Texas, Oct. 17, 2008
- Communication Officer, from 2000 to date.
- Past-President, National Society of Hispanic Physicists. 3/2003-2/2005.
- President, National Society of Hispanic Physicists. 2000-2003.
- President Elect, National Society of Hispanic Physicists, 1997-2000.
- Member, Organizing Committee, Workshop on Physics Education, National Society of Hispanic Physicists and the Panamerican Association for Physics, held at Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, N.L., Mexico, Sept. 22-24, 1997.
- Chair, Nominating Committee, National Society of Hispanic Physicists, 1996.
- Founder, of the Society of Hispanic Physicists. Austin, May 18, 1996.

Sociedad Mexicana de Física

- President, Division of Radiation Physics, 4/2014 – 3/2016
- Vice-President, Division of Radiation Physics, 4/2012 – 3/2014
- Panelist, Round Table Discussion on Science Policy, "I International Symposium on Radiation Physics", Division of Radiation Physics, Sociedad Mexicana de Física, Mexico City, 12/1-3, 2003.
- Member, Executive Board of the Division of Radiation Physics of the Soc. Mexicana de Física, from 2003 to date.
- Member, Executive Board of the Division of Nuclear Physics of the Soc. Mexicana de Física, from 2001 to date.

Academia Mexicana de Ciencia

- Representative of CAPEF in the "FORO DE CONSULTA SOBRE LA LEGISLACIÓN SECUNDARIA EN MATERIA EDUCATIVA". Northeast region, July 3, 2019, Cd. Juarez, Chihuahua, Mexico.
- Member, CAPEF (Committee for the Accreditation of Physics Educational programs), Mexican Academy of Sciences, since 2013, with meetings on 5/2013, 11/2013, 5/2014, 11/14/2014, 5/12/2015, 11/21/2015, 8/2/2016, 11/27/2017, 11/7/2018, 6/26/2019, 11/20/2019, 8/14/2020, 9/11/2020, 1/13/2021, 6/23/2021, 8/13/2021, 9/23/2021, 10/18/2021, 11/3/2021, 11/24/2021, 12/8/2021, 12/14/2021.

Association of Latin American Nuclear Physics and Applications (ALAFNA)

- Observer Member of ALFNA, <http://www.alafna.net/>.
- Member of International Advisory Board of the II, III, V, VI, X, XI, XII Symposium
- Organizer of the IV Symposium in 2001, <http://www.alafna.net/>.

Other

- Member, Advisory Board, "Sistema de Ciencia Tecnología e Innovación (SICITI)" of the Mexican State of San Luis Potosí. [See SICITI web site here](#), and the [list of members here](#). Meetings: June 24, 2019, Nov. 11, 2019, Aug. 31, 2020, Dec. 2, 2020, and May 25, 2021.

- Member, International Advisory Board, Osheroff Fellowship Board, Universidad Autónoma de Cd. Juárez, Oct. 15, 2013 – Aug. 31, 2016.
- Coordinator, Lecture Series, 1st Austin Science and Engineering Festival, Oct. 22-23, 2010.
- Participant, Meeting on Diversity, ExxonMobil-AAPT National Task Force on Undergrad. Phys., Irving, TX, 12/7-8/ 2002.
- 1996-1997 SACNAS advisor, Society for the Advancement of Chicanos and Native Americans.

SERVICE

BOARD MEMBER

- Member, Advisory Board, AccelNet Program (Accelerating Research through International Network-to-Network Collaborations), Lawrence, TX, Dec. 12, 2021.
- Member of 2021 GMIS - HENAAC Award Selection Committee, July 9-16/2021.
- Member, Advisory Board, Equity Accelerator Course, OpenStax at Rice University, Houston, TX, Nov, 2021 – May, 2022.

REFEREEING AND REVIEWING

- Reviewer, NSF, 1996 (RIMI), 2001, 2008, 2019 (nuclear theory), 2007 (NSF- PHY - MPS/PHY), 2021 (ASCEND), 2021 (IUSE).
- Reviewer, Journal article for Scientific Reports manuscript SREP-18-26907, Jul. 30, 2018.
- Reviewer, proposal for the U.S. Army Research Laboratory's Army Research Office, Oct. 1, 2017
- Reviewer, Journal Article for 14th Intl Conf. Ed. and Information Sys. Tech. and App., Oct 20, 2016.
- Reviewer, Journal Article for AAIP Conf. Proc. Journal, June 28, 2016.
- Reviewer, The Physics Teacher, 2017.
- Reviewer, Indian Journal of Engineering & Materials Sciences, 28/12/2016.
- Reviewer, Journal Article for European Physical Journal A, Apr 5, 2016.
- Reviewer, research proposal, Canada Foundation for Innovation, July-Sep. 2015.
- Referee, Rev. Orientación Educacional (Chile), 2015, 2018.
- Reviewer, research proposal, Sloan Digital Sky Survey, Alfred P. Sloan Foundation, Spring 2015.
- Referee, The Physical Review C 1997, 1998, 1999, 2012, 2013, 2014, 2015 (2), 2017 (2).
- Referee, The Physical Review Letters, 1997, 2012 and 2014.
- Referee, AIP Conf. Proceed, 2013 (2), 2014, 2015 (2).
- Referee, Journal of Physics G, 2011.
- Referee, Rev. Mex. Fis., 1995, 2003, 2006, 2008, 2009, 2010, 2011, 2012.
- Reviewer, research proposal, Universidad Nacional de Colombia, Feb. 2009.
- Reviewer, Department of Defense, ten proposals, 2008.
- Reviewer, Petroleum Research Fund, 2003, 2005.
- Reviewer, for Brazilian Physics Journal, November 2003.
- Reviewer, Astronomical Society's Universe at Your Fingertips Resource Notebook, Astronomical Soc. of the Pacific, 2001.
- Reviewer, Pacific Northwest Lab., nuclear physics proposal, 1998.

- Reviewer, Advanced Fuel Cycle FOA Merit Review, Energetics Incorporated, 2008.
- Reviewer, NASA MUST Scholarship Selection Committee, Hispanic College Fund, 2008 and 2009.

CONSULTING

Exam preparation, etc.

- Participant of the STEP Institutionalization Study-Concept Mapping, American Society for Engineering Education, 8/Feb/2018 – 13/Jul/2018.
- Educational Testing Service, Princeton, NJ
 - Writer, Physics GRE questions, 2011, 2012, 2014, 2016, 2017 and 2018.
 - Writer, Physics questions, Texas Teacher Certification exam, 2007, 2008, 2009, 2011, 2012, 2016.
 - Writer, TX 237 TEA Physics 6 - 12, 8/2015, 12/10/2015.
 - Writer, TEA Physical Science 6 - 12, 2014, 8/2015.
 - Writer, TEA Science 4 - 8, 2008, 2011, 2014.
 - Participant of AP Pretest Program, Electricity and Magnetism. 1993.
- Document Rater, for College Board Advanced Placement Best Practices Course Study, March 24, 2006, Center for Educational Policy Research, <http://cepr.uoregon.edu>, <http://www.s4s.org>.
- Physics consultant, for IB physics course at Coronado High School, EPISD, from 1/06 to 5/06.
- Exam Rater, of CLEP Natural Sciences examination, January, 2006, College Board's College Level Examination (CLEP) Program, <https://www.standardsetting.org>.

National Science Foundation, NASA, etc.

- Panelist, Theoretical Nuclear Physics, NSF, March 25-26, 2019, Alexandria, VA.
- Panelist, Graduate Research Fellowship Program, NSF, 2002, 2004, 2005, 2009, 2011, 2012, 2014, 2015, 2016, 2018, 2019.
- Panelist, NSDEG Fellowship Program, Dept. of Energy, National Shore, MD, Feb. 18, 2011.
- Participant, "Office of Space Science (OSS) Education/Public Outreach Council", sponsored by NASA/OSS, Galveston, Texas, Dec. 5, 2000.
- Member, Diversity on the Geoscience, NSF Directorate of Geosciences, Arlington, VA, 5/18-19/1999.
- Panelist, NSF Div. Undergrad. Studies, Instrumentation & Lab. Improvement Program, 1994, 1995, 1996 and 1997.
- Member, Visiting Committee, to review NSF's Div. of Undergraduate Education, Arlington, VA, May 21-23, 1997.
- Member, Educational Task Force, NASA's Office of Space Science, 1995-1996. Attended meetings in Washington, D.C., Annapolis, and Las Cruces from 11/95 to 5/1996.

Book reviews, etc.

- Spanish translation of scientific terms, OpenStax, 12/11/2020-2/15/2021. More [information here](#).
- Virtual Symposium "Interactive Video Vignettes", Cengage, 10/23-24/2019. More [information here](#).
- Review of "Understanding our Universe", W.W. Norton, 10/2/2019 – 11/11/2019
- Focus Group "The future of astronomy education", Macmillan, Oct. 19, 2019, Austin, TX.
- Review of Digital Resources in Physics, Cengage, 3/26-27/2019.
- Participant of survey for MasteringPhysics, Pearson, 1/29/2018.
- Review of Sapling Astronomy, Macmillan, 14/Apr/2018.

- Review of "College Physics 2e", McMillan, 20/Oct/2017.
- Review of "Astronomy: The Human Quest for Understanding!" WH Freeman, 4/20/2016.
- Participant, Focus Group "ebooks and digital products", Pearson, 19/12/2016.
- Review of "Intro to Astronomy", Macmillan, 4/11/2016.
- Digital Project Topic 5: Work and Energy, Cengage, 6/2015.
- Physics Prelecture Videos Project: Simple Harmonic Motion, Pearson Higher Education, 6/2015.
- Focus Group (Problem Library Review), The Expert TA System, 9/July/2015.
- Faculty Focus Group, Centgage, 4/9/2015.
- Physics Prelecture Videos Project: Ohm's Law, Pearson Higher Education, 3/2015.
- Chapters 30-35 of Physics for Scientists and Engineers, by Katz, Cengage, 2012.
- Lecture presentations for Physics, by Giambattista, McGraw-Hill, 2011
- Chapters 20-25 of Physics: principles and problems, Quadgraphics2, McGraw Hill, 2011.
- Chapters 21-26 of University Physics, by Bauer and Westfall, McGraw Hill, 2011.
- "Understanding Physics", 2nd ed., by Cummings, et al., for Content Connections, 2005.
- "Modern Physics" by Mark Edwards, McGraw-Hill, \$150, 7/2002.
- "Concept of Modern Physics" by Beiser, McGraw-Hill, 7/2000.
- "Fundamentals of Physics", by Halliday, Resnick and Walker, John Wiley and Sons., 994.
- "Modern Physics, Models and Applications" of Wm. C. Brown Publisher, 1996.

Program advisor

- Evaluator of Physics Program, Southern Illinois University, 17-20, Jan., 2018.
- Evaluator, Educational Proposal, Universidad Playa Ancha, Valparaiso, Chile, 9/2012.
- Ad hoc evaluator, Universidad Catolica de la Santisima Concepcion, Concepcion, Chile. (12/12-16/2009).
- Evaluator of Physics M.S. Program, of Texas A&M - Commerce, Nov. 2008.
- Evaluator, Educational Proposal MECESUP UPA 061, Universidad Playa Ancha, Valparaiso, Chile 27/7-12/8 2008.
- Evaluator of Physics Ph.D. Program of UT Brownsville, subcontracted by UT Brownsville, Sept. 2006.
- External reviewer for faculty promotion , University of Colorado, Colorado Springs, August, 2006.
- External Member of Physics Chair Search Committee, University of Texas at San Antonio, 11/2006.
- Advisor, Engineering Physics degree plan of the Universidad Autónoma de Cd. Juárez, 11/2003.
- Advisor, of Engineering Physics degree plan of the Universidad Autónoma de Cd. Juárez, 11/2003.
- Advisor, Engineering Physics Career, Universidad Autonoma de Ciudad Juarez, 1997 to 2001.
- Judge, "UT Brownsville AMP Student Presentations", Univ. of Texas at Brownsville, 4/9/99.
- Participant, "Foro de Discusion de las Ciencias en Cd. Juarez", UACJ, at Juarez City Hall, 5/18/1998.
- Consultor, Universidad Autonoma de Ciudad Juarez, for the creation of a Physics Career. 1994-1995.

Workshops and courses

- Instructor, Outreach and Retention Workshop, for instructors of Universidad del Norte, Antofagasta, Chile, January 4 to 11, 2014.
- Instructor, physics workshop for pre-K and K teachers, Ysleta Independent School District, 8/3-12/06.
- Instructor, physics development workshop for 32 MSP Staff Developers, UTEP's MSP, Dec. 5, 2005.
- Instructor of physics development workshop for high school teachers, UTEP's MSP, July 20-21, 2005.
- Workshop, "Middle School Physics", delivered to 32 MSP Staff Developers, at UTEP, Dec. 5, 2005.

- Workshop, "Deepening Science Knowledge for High School Physics Teachers", delivered to 35 high schools teacher at UTEP, July 20-21, 8:30 am. – 3:30 pm, 2005.
- Workshop, "Physics for Pre-K and K Students – Bilingual Seminar for Teachers", delivered to two groups of 45 and 54 teachers at R, Kennedy Pre-K Center, Ysleta ISD, El Paso, Texas, 6/8-9/2005.
- Instructor, "Quantum Mechanics", at the Universidad Autonoma de Ciudad Juarez, Spring 2001.

Universo (Spanish version of StarDate)

- Technical editor, "Universo", Spanish version of "Star Date", radio show produced by McDonald Observatory of the University of Texas at Austin. Organizer of Focus groups, and technical translator. From 1994 to 2011.
- Technical Editor, "Universo a sus pies", by the Astronomical Society of the Pacific, Summer-Fall 2001.
- Technical Editor, "Universo: Ancient Horizons", UT Austin and Science Museum of Virginia, 4/2000.
- Technical Editor, "Universo - Almanaque Celestial", 1996 and 1997, McDonald Observatory.

OUTREACH AND DISSEMINATION

Throughout his career Dr. Lopez has been a leader in outreach activities, especially those favoring Hispanics. In 1993 he was the Chair of the Committee on Minorities of the American Physical Society. From 1993 to 1995 he created the NASA Physics Centers in six high schools of the El Paso area. In 1995 he obtained a grant from the Sloan Foundation to found The National Society of Hispanic Physicists, now with over 400 members. Going beyond our borders, he has trekked most of Mexico to recruit dozens of students for graduate studies in the US, many of whom are now professional physicists in Mexico and elsewhere. An avid writer, he has written dozens of general audience articles both in English and Spanish for newspapers and journals in the USA, México and Spain, and has given over 48 TV, radio and newspaper interviews.

SYNERGISTIC ACTIVITIES

- **Hispanic Physicists Radio Series.** With funding from the American Physical Society Dr. López interviewed dozens of Hispanic physicists to create the Hispanic Physicists Radio Series with Ixtlan Communications. The series was designed to be broadcast in Spanish speaking radio stations throughout the USA. Interviews were taped from 2011 to 2013, studio recording was done in 2014 and the program was launched in October 2014 in time for the National Hispanic Heritage Month. The 3-minute capsules can be heard here: <http://us9.campaign-archive1.com/?u=bd7ae837c60ca7e194771387d&id=6439df2a02&e=e49c156ea1>, and the longer interviews can be found here: <http://www.visual-physics.org/Hispanic-Physicists/HP.html>.
- **Astronomy Radio Show UTEP en El Reto.** Using monies from his own Schumaker Professorship, Dr. Lopez supported a Spanish language radio show ("UTEP en El Reto") for several months with Luis Basurto through XEWG 1240 AM, and a weekly column in the Spanish language newspaper "El Reto" for over one year.
- **NASA Physics Centers.** With funding from GTE (\$30,000), UTEP's MRCE (\$10,000) and NASA (\$84,000), Dr. Lopez maintained an outreach program from 1993 to 1997 which, among other activities, created six "NASA Physics Centers" in six high schools in the El Paso area to do outreach activities, including math and physics tutoring, publishing of a newsletter "Tlaxihuicatl" ("The sky observer" in Nahuatl, the Aztec language), presentations of famous researchers, such as Nobel Laureate Leon Lederman, physics competitions, Open House events, telescope nights, field trips and many other activities.
- **Universo (Spanish version of StarDate).** From 1995 to 2010 Dr. Lopez joined efforts with McDonald Observatory's Damond Beningham, and Arturo Vazquez's "Ixtlan Communication" group of broadcast experts to produce "Universo", the Spanish version of StarDate with modified scripts to include Hispanic issues and anecdotes in the daily 2 min. segments. The program was supported with funds from the National Science Foundation, Honda Corporation, NASA, and many other funding agencies and foundations and was broadcast in over 180 radio stations throughout the US, Mexico and Central and South America; at present the show continues monthly due to lack of funds. For more information see <http://radiouniverso.org/>.

INTERVIEWS

1. Interview about Hispanic issues, by PhD candidate Sean Petty, Grand Canyon U., 2/9/2021.
2. UTEP Video interview for Campus Newsfeed. [See video here](#) and [article here](#). Nov. 27, 2018.
3. Radio show "Pájaro Latinoamericano" with Chelis López, KPOO Radio 89.5 FM, San Francisco, CA, [listen to the 30 min Spanish language interview here](#). Sep. 5, 2018.
4. Radio show "Café con Leche" with Lilia Galindo about the Presidential Award PAESMEM, 15 min., Radio Hermosa 1470 AM, in Palmdale, CA, [listen to Spanish language interview here](#). Aug 20, 2018.
5. In article "¿Existe la posibilidad de un fraude electoral?", by Julián Germán Molina Carrillo of Mexican newspaper Milenio, Mexico City. [Read article here](#). May 25, 2018.
6. In article "Científicos advierten posibilidad de fraude cibernético electoral", by Francisco Sánchez of [Intolerancia Diario](#), Puebla, Puebla, Mexico. [Read article here](#). May 24, 2018.
7. In article "Las dos elecciones del proceso 2018", by Bernardo Barranco of Mexican newspaper La Jornada, Mexico City. [Read article here](#). May 2, 2018.
8. In article "Para evitar fraude, se necesita voto masivo y contundente: López Gallardo", by Emmanuel Ameth of [EA Noticias](#), Pachuca, Hidalgo, Mexico. [Read article here](#). May 21, 2018.
9. Interview at radio show "Hilo Directo" with Angel Otero, Arturo Del Hierro, and Servando Pineda, Radio Net in Ciudad Juarez, Mexico, about electoral fraud. Apr. 16, 2018.
10. In article "Un investigador de UTEP advierte que sí es posible, el 1 de julio, un "fraude informático" desde el INE", by Sheila Rosagel of [www.sinembargo.mx](#), Mexico City. [Read article here](#). March 19, 2018.
11. In Spanish, 1:00 hrs, with José Cruz Pérez Rucobo in his radio program "La vida es una tómbola" of Radio Nueva República. [Listen to the interview here](#), Dec. 4, 2017.
12. In Spanish, 1:38 hrs, with José Cruz Pérez Rucobo in his radio program "La vida es una tómbola" of Radio Nueva República. [Listen to the interview here](#), Sep. 12, 2017.
13. In Spanish, 2 Hrs, with José Cruz Pérez Rucobo in his radio program " La vida es una tómbola " of Radio Nueva República. [Listen to the interview here](#), Apr. 17, 2017.
14. In article "#Sinvotonohaydinero", of Antonia Tapia in magazine Reporte Nivel Uno, about how to finance the Mexican political parties. [See article here](#). Feb. 14, 2017.
15. In Spanish, 2 Hrs, with José Cruz Pérez Rucobo in his radio program "Filosofía a ras de suelo" of Radio Nueva República. [Listen to the interview here](#), May 30, 2016.
16. Newspaper interview in El Diario, Juarez, Mexico, April 15, 2016.
17. MVS Noticias - Exa radio. (April 12, 2016). [Read article here](#).
18. Interview, 20 Min. in program "Cosa Pública" of Radio Universidad de la U de Guadalajara. [Listen to the interview here \(starts in minute 13\)](#), February 19, 2016.
19. Radio DK1250, February 19, 2016.
20. Interview, with [Max Cortés](#) in Radio FM 92.5 of Colima. [Listen to the interview here](#), Feb. 15, 2016.
21. "Perspectives El Paso: Political Reform in Mexico", 30 minute TV interview by Dr. Leon Blevins of El Paso Community College TV Channel 14, aired five times the week of May 17-22, 2015, <https://www.youtube.com/watch?v=sB-JFfhbcw>.
22. "Bridge-builder to Hispanic Community Wins Bouchet Award", by Michael Lucibella, APS News, 2/2015, http://www.aps.org/publications/apsnews/201502/bouchet.cfm#.VOTc4JKf_5o.twitter

23. "Perspectives El Paso: Electoral Fraud and Political Reform in Mexico", 30 minute TV interview by Dr. Leon Blevins of El Paso Community College TV Channel 14, Oct. 23, 2013. See the interview here: <https://www.youtube.com/watch?v=S8K218NgiYA>
24. "Academicos locales refutan a politologo que vaticina derrota de ley migratoria", interview in El Diario de El Paso, July 10, 2013 http://diario.mx/El_Paso/2013-07-10_ae48aa67/academicos-locales-refutan-a-politologo-que-vaticina-derrota-de-ley-migratoria/
25. "La explosión en Pemex: no les creemos...", interview by Patricia Dávila for Mexican magazine Proceso, Feb. 9, 2013, <http://www.proceso.com.mx/?p=333248>.
26. Interview in "Hilo Directo" by Arturo del Hierro, Cd. Juárez, Oct. 26, 2012, <http://www.colloqui.org/colloqui/2012/11/26/entrevista-con-hilo-directo-parte-1-de-4.html>
27. "¿Fraude Electoral 2012?", 30 minute interview in Línea Abierta, by Martha Elena Ramírez of Radio Bilingüe, Oct. 12, 2012, <http://www.colloqui.org/colloqui/2012/10/14/entrevista-en-programa-voz-publica-con-martha-elena-ramirez.html>, Mexico City, Mexico.
28. Interview in "Línea Abierta", in radio show "Voz Pública" by Martha Elena Ramírez of Radio Bilingüe, Oct. 12, 2012, Mexico City, Mexico, <http://archivosderb.org/?q=es/node/7317>, interview starts in minute 40.
29. Interview in "Upfront" by Bryan Edwards Ticker, KPFA, Berkeley, CA, starts in minute 6, June 29, 2012, <http://www.colloqui.org/?offset=1344133157387&author=51f5dfb5e4b00230707e9ca2>.
30. Interview in "Hecho en California" by Marcos Gutierrez, San Francisco, CA, October 4, 2012.
31. "Estudiarán alemanes basurero nuclear...", El Diario de El Paso, El Paso, TX, Sep. 19, 2011.
32. Radio interview, Volumen Extremo Programa "Visión Morena", Dallas, Texas, 3/17/2012, 12-2 PM.
33. Video interview, for The Peer-Led Team Learning International Society, Oct. 2011.
34. Interview in "Hecho en California" by Marcos Gutierrez, San Francisco, CA, June 23, 2012, <http://www.colloqui.org/colloqui/2012/6/23/entrevista-con-marcos-gutierrez-de-hecho-en-california.html>.
35. Interview in "Café con Leche" by Lilia Galindo, Valle del Antílope, CA, June 20, 2012, <http://www.colloqui.org/?offset=1344133157387&author=51f5dfb5e4b00230707e9ca2>.
36. Interview in "Línea Abierta", in Radio Bilingue by Chelis López, June 19, 2012, Oakland, CA, <http://www.colloqui.org/colloqui/2012/6/19/entrevista-con-linea-abierta-de-radio-bilingue.html>.
37. Radio interview in "RAYMN8R" in American Conservative Radio Network, ½ hour, Apr. 5, 9:00 PM EST, 2011, by Ray Spitzer, <http://www.blogtalkradio.com/ac-nation/2011/03/23/the-raymn8r-report>.
38. Radio interview in "Breaking it down with DT" in American Conservative Radio Network, ½ hour, Mar. 17, 10:00 PM EST, 2011, by David Terry, <http://www.blogtalkradio.com/ac-nation/2011/03/18/breaking-it-down-with-dt>.
39. TV and Radio Interview "Alerta sobre posible fraude electoral en 2012", 5 min. by Josefina Real of Medios UDG Noticias, in the studios of TV Universidad, Universidad de Guadalajara, Guadalajara, México, Mar. 12, 2011. <http://www.medios.udg.mx/node/7456>.
40. Radio Interview, "Medios UDG Noticias", by Josefina Real, by phone, Universidad Autónoma de Guadalajara, Mexico, 9:13 min., May. 6, 2010.
41. Radio Interview, "A ciencia cierta", by Rocío Ortiz, in the studios of Radio Zacatecas, Zacatecas, Mexico, 9:59 min., Mar. 9, 2010, <http://www.youtube.com/watch?v=ZaFm1Jk4ueU>.
42. Radio Interview, "Enfoque Latino", by Rubén Tapia, by phone, Radio Pacifica KPFC 90.7 FM, Los Angeles, CA, 7:37 min., Mar. 9, 2010, <http://www.youtube.com/watch?v=nQ4-2Lsy2qI>.
43. Interview in Diario de El Paso, Nov. 2, 2009, by Celia Gonzalez.
44. Report in El Paso Times, Nov. 2, 2009.
45. Interview, in Diario La Jornada Aguascalientes, Aug. 31, 2009, by Mauricio Navarro, page 11: http://newwarrior.com/jornada/hemeroteca/2009-08_Agosto/31082009.pdf.

46. Interview, in newspaper "Aguas", Aguascalientes, Aug, 8, 2009.
47. Radio Interview, "7:00 AM", by Gaby Hermosillo, in the studio of Radio Universidad, Universidad Autónoma de Aguascalientes, Aguascalientes, Mexico, 10:07 min., 8/20/2009, www.youtube.com/watch?v=HHApnshWl-0.
48. TV Interview, "En Contexto", 4:53 min. by Rubén Luengas, in the studios of Telemundo, Burbank, CA, Jul. 31, 2009, <http://www.youtube.com/watch?v=Gh6Aov84wOk>.
49. Science Capsules, in "El Reto Radio" in KVIV, El Paso, every Wednesday from 3:45 to 4:00 pm, from Sept. to Nov., 2008, host: Dr. Samuel Schmidt.
50. Mention in article "Universo Radio Program Airs 5,000th Episode, Brings Astronomy and Skylore to Spanish-Speaking Audience", Nov. 25, 2008, http://www.utexas.edu/news/2008/11/25/universo_radio/.
51. "UTEP en El Reto, ½ hour radio show, with Luis Basurto, XEWG 1240 AM, Cd. Juárez, México, from Oct. to Dec. 2008, <http://utepelreto.blogspot.com/2008/12/emisin-del-da-13-de-diciembre-de-2008.html>.
52. Interview in "Línea Abierta" in Radio Bilingüe, broadcast in all USA, 1 hour, Dec. 12, 2007, by Dr. Samuel Schmidt, http://archivosderb.org/?q=es/audio/by/guest/jorge_l_pez.
53. Article "Physics mentoring on the Mexico-US Border", Minority Scientists Network of the American Association for the Advancement of Science, 6/2002.
54. Article "Tragedy does not stop nuclear physics seminar at UTEP", by Georgiana Vines for El Paso, Inc., El Paso, TX, 11/4-10/2001, featuring the IV Latin American Symposium on Nuclear Physics organized by J. A. Lopez in Mexico City.
55. Article "Nuclear Struggles", by Georgiana Vines for The News Sentinel, Knoxville, TN, October 16, 2001, featuring the benefits of the IV Latin American Symposium on Nuclear Physics organized by J. A. Lopez in Mexico City.
56. ½ hour interview, by Juarez TV show in Ch. 56, February, 2001.
57. Article "The New College Try", Time Magazine, January 8, 2001, featuring the innovating approach to teaching Science Methodology and Physical Science of S. Blake and J. Lopez, <http://www.time.com/time/education/article/0,8599,93264,00.html>
58. Mention in Article "Meet the Experts", NOVA, UTEP, Fall 2001, featuring experts on collaborations with Mexico.
59. Interview, by Channel 5 XECJ, on the January lunar eclipse, Jan. 2000.
60. Interview, by UTEP's NASA/NRST Team, presented by H. Shulte at the Atlanta NASA/NRST Conference, 9/2000.
61. Interview, by Radio Net 1490 AM, "Al filo de la ciencia", September, 2000.
62. Interview, by Hector Noriega, at Juarez radio show "Civilizaciones", FM 98.3, 12/5/1998. With Alfredo Aranda.
63. Interview, by an El Paso TV station (Channel 7), on my organization of the Meeting of the Texas Section of the American Physical Society at UTEP, Oct 15, 1998.
64. Interview, published in Hispanic Outlook in Higher Education, by Ines Alicea, New Jersey, Apr. 20, 1998.
65. Interview, published in UTEP's NOVA, by Walli Haley, Spring 1998.
66. Interview, published in Gaceta Universitaria, the newspaper of the Universidad Autónoma de Cd. Juárez, in "El Arte de Pensar e Investigar", Sept., 1998.
67. Interview, by a San Luis Potosí TV station, on my visit to Universidad Autónoma de San Luis Potosí to recruit Mexican students for our M.S. Physics Program., May 1998.
68. Interview, in "Faculty/Mentor Profiles" in UTEP's "Nova", UTEP News and Publications, Vol 34, No. 3; No. 133, 1998.

69. Interview, published in The Dallas Morning News in "Scientists strive to turn young Hispanics' eyes toward the sky", by Mercedes Olivera, Aug. 13, 1997.
70. Interview, published in El Paso Herald Post in "UTEP shows off hands-on learning", by Laurie Gallardo, 11/12/96.

PRESENTATIONS

1. "Espectroscopia, o como detectan drogas y explosivos en los aeropuertos", Ciencia en el Bar, Pasto.Colombia, 10/22/2021, [see recording here](#).
2. "Física y política", Univ. Aut. de Zacatecas, via online, Mar. 25, 2021, see video here: <https://www.facebook.com/events/4119339854772237/>.
3. "Astronomy and the end-of-year festivities", Dec. 17, 2020, Grupo ChacMool and ArtStudio, Austin, TX. Via Online.
4. "Spectroscopy and applications", May 22, 2020, Former Students of Instituto Tecnológico de Ciudad Juárez, Via online, audience: 40.
5. "Física atómica, El Chapo, Osama Bin Laden y El Papa", Apr. 9, 2020, Grupo ChacMool and ArtStudio, Austin, TX.
6. Book Presentation, "Estudios científicos de fraudes electorales", Librería León, Puebla, Pue. Mexico, April 7, 2016
7. Book Presentation, "Estudios científicos de fraudes electorales", [Librería Casa de Letras](#), Guadalajara, Mexico, February 19, 2016
1. "Pasta italiana en estrellas de neutrones", presentation to 100 middle school students at the 21st Science and Technology Week, Science Museum "La Rodadora", Cd. Juárez, Chihuahua, Mexico, Oct. 24, 2014.
2. "Importance of Diversity in Science and Engineering", presented to Boeing Hispanic Employees Network, El Paso, TX, March 21, 2013.
3. "Quantum Consciousness", [Phyl-Phys group](#), GlasBox, El Paso, TX, 4/22/ 2011.
4. "Hispanics in Physics", Colloquium at Cal State Fresno, Mar. 18, 2011.
5. "Scientific studies of electoral data", Centro Universitario de Ciencias Económico Administrativas, Universidad de Guadalajara, Mexico, Mar. 14, 2011.
6. "Scientific studies of electoral data", Centro Universitario de Ciencias Exactas e Ingeniería, Universidad de Guadalajara, Mexico, Mar. 15, 2011.
7. "Fraude Electoral", Biblioteca "Roberto Cabral del Hoyo", Zacatecas, México, Mar 9, 2010.
8. Lopez, J. A., Book Presentation in Los Angeles, "Scientific studies of electoral data," Suplemento Comunitario KPFK 90.7 FM, Frente Amplio Progresista, 3471 w. 8th St, Los Angeles, CA (8/29/2009).
9. Seminar, "Scientific studies of electoral data", Juárez Rotary Club, Cd. Juarez, Sep. 2009.
10. Seminar, "Física y Arte", Club Rotario Cd. Juárez, Oct. 4, 2007.
11. Seminar, "Physics of Easter", Heisenberg Club, Universidad de Colima, Colima, Mexico, 6/2/2006.
12. Seminar, "Einstein's Mistakes", Heisenberg Club, Universidad de Colima, Colima, Mexico, 9/4/2005.
13. Seminar, "Science studies at UTEP", Juarez Rotary Club, Cd. Juarez, Sep. 23, 2004.
14. Seminar, "UTEP's Very Small Array", Heisenberg Club, Universidad de Colima, Mexico, 6/4/2004.
15. Seminar, "Física para Kinder ", Grupo Abel, ITESM-Cd. Juarez, April 12, 2003.
16. Seminar, "Problemas matemáticos ", Grupo Abel, Universidad Autónoma de Ciudad Juárez, 6/2/2001.
17. Seminar, "Física Nuclear en el año 2000", at the I Semana de Ciencia Y Tecnología, organized by Sociedad Mexicana para el Progreso de la Ciencia y la Tecnología, Universidad Autónoma de Ciudad Juárez, Mexico, Apr. 20-24, 1998.

18. "Radiacion de Fondo", presentation at the VI Semana de Astronomia, organized by the Sociedad Astronomica de Cd. Juarez, at the Universidad Autonoma de Ciudad Juarez, Mar. 23-27, 1998, Juarez, Mexico.
19. "The Physics Circus", 50th Anniversary of Instit. Tec. de Durango, 5/14/1998, Durango, Mexico.
20. How Many Barbers are there in Juarez? UACJ's Grupo Abel, UACJ, May, 1998.
21. "SOMPROCYT Week", weeklong presentations of science talks at Univ. Aut. Cd. Juarez, 4/1998.
22. "Radiacion de Fondo", presentation to Juarez's math club "Abel", at the Universidad Autonoma de Ciudad Juarez, Feb. 15, 1997, Juarez, Mexico.
23. "Mecanica Cuantica", presentation to middle school teachers from Chihuahua's Department of Education, UTEP, Dec. 6, 1997, Juarez, Mexico.
24. "Contact", after-movie discussion at Plaza Juarez Movie Theater, Oct. 25, 1997, co-organized by Sociedad Astronomica Juareense and Universidad Nacional Autonoma de Mexico, Juarez, Mexico.
25. "Science Education and Research in Mexico", presented to UTEP's POLS 3437: "UG The Politics of Mexico", 12/2/ 1997.
26. Seminar to UTEP's Club Zero, Math. Department, April 5, 1996.
27. "Ondas Gravitacionales", presentation a la Sociedad Astronomica de Cd. Juarez, at the Universidad Autonoma de Ciudad Juarez, Dec. 20 1996, Juarez, Mexico.
28. Host of NASA's OSS Education Director, Dr. Jeffrey Rosendhal, April 25-26, 1996. Seminar presented by Dr. J. Rosendhal: "Scientists' Role in Education".
29. Organizer of book and journal donations to the University Autonoma de Ciudad Juarez, with the help of Dr. Jorge Gardea, the American Chemical Society and NMSU. 1995-1996.
30. Host of American Physical Society's Director of Education, Dr. Ramon Lopez, March 16, 1995. Seminar presented by Dr. R. Lopez: "NSF Systemic Reform".
31. "La Materia Oscura", general audience article published in Alfa Geminis, V, pp. 3-6, 1993, Mexico.
32. "Physics Circus", presented at the 1993 SACNAS Conference, 1/1993, Albuquerque, New Mexico.
33. "Energia Nuclear", presentation to high school students at the Instituto Tecnologico y de Estudios Superiores de Monterrey, Cd. Juarez Campus, May 1993.
34. "Nuclear Fragmentation", presented to the Sigma XI society, Nov. 17, 1992, UTEP.
35. "Nuclear Fragmentation", Sociedad Astronomica Juareense, 11/14/1992, Univ. Aut. de Cd. Juarez.
36. Seminar, "Nuclear Fragmentation", presented to the Sigma XI society, Nov. 17, 1992, UTEP.
37. Science Presentations, telescope observations, physics demonstrations, etc. Mostly to Eastwood Heights Elementary School, and other schools in the Socorro ISD.

PUBLICATIONS

Alfa-Geminis (Sociedad Astronómica Juareense)

1. "Roswell: el final de un mito", Alfa Geminis, Jul-Aug 2010, www.alfageminis.com.mx/ediciones/2010/Julio_2010.pdf
2. "Comprando lunas", Alfa Geminis, May 2009. http://www.alfageminis.com.mx/ediciones/2009/Mayo_2009.pdf
3. "Ondas Gravitacionales", Alfa Geminis, 2008.
4. "La Materia Oscura", Alfa Geminis, V, pp. 3-6, 1993.

La Jornada

5. "Remojando las barbas del Conacyt", 8/14/2000, La Jornada <http://serpiente.dgsca.unam.mx/jornada/2000/ago00/000814/cien-cara.html>
6. "G. Bruno, Mártir de la ignorancia", 3/13/2000, La Jornada

<http://serpiente.dgsca.unam.mx/jornada/2000/mar00/000313/cien-cara.html>

7. "2000 Año Bisisesto", La Jornada 2/14/2000,
<http://serpiente.dgsca.unam.mx/jornada/2000/feb00/000214/cien-cara.html>

El Reto

8. "Roswell: El final de un mito", "El Reto", May 2010,
9. "Los errores de Einstein", "El Reto", No. 308, Oct. 21-27, 2005.
10. "Ovnis y yo", "El Reto", 2/3/2000
11. "Comprando lunas", "El Reto", 1/22/2000
12. "Física aplicada en Colombia", "El Reto", 9/23/99
13. "Dios: lo que dice la ciencia", "El Reto", 9/16/99
14. "¿Y la ciencia en Juárez?", "El Reto", 9/9/99
15. "Perturbando el Universo", "El Reto", 9/2/99

El Diario (Mexican newspaper)

16. "La Nueva Física", published in "El Diario", 4/7/99
17. "El Circo de Física", published in "El Diario", 4/22/99
18. "La Nanofísica", published in "El Diario", 3/23/99
19. "Teletransportación", published in "El Diario", 3/6/99

Forbes Mexico

20. Article "¿Por qué Costa Rica sí y México no?", with Emmanuel Ameth, Forbes México, July 24, 2014,
<http://www.forbes.com.mx/costa-rica-si-y-mexico/>
21. Article "El Sueño Guajiro de la Reforma Energética en México", with Emmanuel Ameth, Forbes México, May 28, 2014, <http://www.forbes.com.mx/el-sueno-guajiro-de-la-reforma-energetica/>

Colloqui (www.colloqui.org)

22. Article "La accidentada educación pre-escolar en México", Colloqui, July 15, 2013,
<http://www.colloqui.org/colloqui/2013/7/15/la-accidentada-educacion-pre-escolar-en-mexico.html>
23. Article "Las calenturientas mentes del calentamiento global", Colloqui, June 27, 2013,
<http://www.colloqui.org/colloqui/2014/1/22/las-calenturientas-mentes-del-calentamiento-global>
24. Video "Estudio de los incrementos del PREP", Alberto Altamirano y Jorge A. López, Colloqui, Sep. 5, 2012, <http://www.colloqui.org/colloqui/2012/9/5/estudio-de-los-incrementos-del-prep-por-alberto-altamirano-y.html>.
25. Article "Sexo y Muerte en el PREP", Alberto Altamirano y Jorge A. López, Colloqui, Sep. 3, 2012,
<http://www.colloqui.org/colloqui/2012/9/3/sexo-y-muerte-en-el-prep.html>.
26. Video "Estudio de las casillas especiales", César García Bojorquez, Jorge A. González, y Jorge A. López, Colloqui, Aug. 31, 2012, <http://www.colloqui.org/colloqui/2012/8/31/estudio-de-las-casillas-especiales.html>.
27. Video "La correlación de Pearson y el PREP", Jorge A. López, Colloqui, Aug. 30, 2012,
<http://www.colloqui.org/colloqui/2012/8/30/la-correlacion-de-pearson-y-el-prep.html>.
28. Article "Correlación de Pearson de las diferencias de las diferencias de las diferencias de las diferencias de las diferencias de las diferencias entre datos sucesivos del PREP", Jorge A. López, Colloqui, Aug. 26, 2012, <http://www.colloqui.org/colloqui/2012/8/26/correlacion-de-pearson-de-las-diferencias-de-las-diferencias.html>.
29. Article "El sesgo de los encuestadores, ¿pie para acción legal?", Jorge A. López y Samuel Schmidt, Colloqui, Aug. 16, 2012, <http://www.colloqui.org/colloqui/2012/8/16/el-sesgo-de-los-encuestadores-pie-para-accion-legal.html>.

30. Article "¿Cuántos votaron?", Jorge A. López, Colloqui, Aug. 7, 2012, <http://www.colloqui.org/colloqui/2012/8/7/cuantos-votaron.html>
31. Article, "Correlación de Pearson", Jorge Alberto López Gallardo, Colloqui, July 2, 2012
32. Article, "¿Qué tan fácil es obtener un Pearson $r > 0.999$?", Jorge Alberto López Gallardo, Colloqui, July 4, 2012, <http://www.colloqui.org/colloqui/2012/7/4/segundo-analisis-de-las-elecciones-contribuciones-de-dei.html>
33. Article, "Controlando el tendencioso PREP", Jair Garza y Jorge Alberto López Gallardo, Colloqui, July 9, 2012, <http://www.colloqui.org/colloqui/2012/7/9/quinto-reporte-de-analisis-controlando-el-tendencioso-prep-p.html>.
34. Article, "Correlación entre incremento de votos", Alberto Altamirano y Jorge Alberto López Gallardo, Colloqui, July 25, 2012, <http://www.colloqui.org/colloqui/2012/7/25/correlacion-entre-incrementos-de-votos.html>.
35. Article, "Luis Mochán detecta numéricamente a los mapaches electorales", Luis Mochán y Jorge Alberto López Gallardo, Colloqui, July 19, 2012, <http://www.colloqui.org/colloqui/2012/7/19/luis-mochan-detecta-numericamente-a-los-mapaches-electorales.html>.
36. Article, "Predicciones", Jorge Alberto López Gallardo, Colloqui, June 28, 2012, <http://www.colloqui.org/colloqui/2012/6/28/predicciones.html>.

Other publications

37. Article "Chayito", with José Luis Esparza, SDP Noticias, 9/25/2014, <http://www.sdpnoticias.com/columnas/2014/09/25/chayito>.
38. Article "El lenguaje de la física", Revista Digital Universitaria, UNAM, Aug./1/ 2011, ISSN 1607-6079, <http://www.revista.unam.mx/vol.12/num8/art73/index.html>
39. Article "Roswell: fin de un mito", Suplemento Científico, La Jornada Veracruz, 8/May/2011, http://wiki.utep.edu/download/attachments/39715320/EIJarchoCuantico_201105.pdf?version=1
40. Article "Physics mentoring on the Mexico-US Border", Science, American Association for the Advancement of Science, 6/ 2002.
41. Article "The New College Try", Time Magazine, January 8, 2001, featuring the innovating approach to teaching Science Methodology and Physical Science of S. Blake and J. Lopez, [www.time.com/time/education/article/ 0,8599,93264,00.html](http://www.time.com/time/education/article/0,8599,93264,00.html)
42. Editor of "El Paso Physics Teacher" the newsletter of the Greater El Paso Physics Teachers Association. Published quarterly from 1/95 to 5/98.
43. Editor of "The Hispanic Physicist", newsletter, Nat. Society of Hispanic Physicists, since 5/97 to date.
44. "Implementing the Office of Space Science Education/Public Outreach Strategy", published by NASA's OSS-Space Science Advisory Committee Education/Public Outreach Task Force, 10/15/1996.
45. Editor of "El Paso Physics Teacher" the newsletter of the Greater El Paso Physics Teachers Association. Published quarterly from 1/95 to 5/96.
46. Editor of COM's newsletter "COM...munications", published by APS, from 1/94 to 12/94.
47. Editor of "Tlaxihuicatl", a physics newsletter published each semester with funds of NASA's Physics Centers Programs. From 9/94 to 6/97.
48. "Northeast Chapter of the Society for the Advancement of Chicanos and Native Americans in Science Formed", published in the September 1993 issue of "C.O.M...UNICATIONS", the newsletter of APS' Committee on Minorities.
49. "Leading Latinos to Physics", September 1992 issue of "C.O.M...UNICATIONS", the newsletter of the Committee on Minorities of the American Physical Society, 1992.

50. "Leading Hispanics to Science Can Be a Science in Itself", published in the section "Voices" of Vista, the weekly supplement to major US newspapers, December 25, 1990.
51. J.A. Lopez and V. Martinez, "Cuando Explotan las Estrellas", La Vanguardia, 3/1988, Barcelona, Spain.
52. J.A. Lopez and V. Martinez, "Hivern Nuclear", (in Catalan), El Temps, August, 1987, Valencia, Spain.
53. J.A. Lopez and V. Martinez, "¿Qué pasó en Chernobyl?", El Universal, April, 1987, Juarez, Mexico,.
54. J.A. Lopez and E. Martinez-Gonzalez, "Una Visita al Museo Cosmico", El Pais, 3/1986, Madrid, Spain.

OUTREACH ACTIVITIES

1. Recruiting Trips to Mexico: Guadalajara (Feb. 2016), Hermosillo (Mar. 2016), Puebla (Apr. 2016).
2. "Nuclear Energy ", presentation to 6th graders, Ysleta I.S.D., El Paso, TX, Oct. 14, 2009.
3. "Physics Circus", presentation at the 2009 Science Fair, Balboa Park, San Diego, CA, Apr. 4, 2009.
4. Recruiting trip, University Autónoma de Baja California, Ensenada, BC, Mexico, Nov. 24-26, 2008.
5. Recruiting trip, University Autónoma de Sinaloa, Culiacán, Sinaloa, Mexico, May. 20-22, 2007.
6. Organizer of "Ciencia de frontera", a series of 11 weekly talks for high school student from Ciudad Juarez, Mexico, at the Universidad Autónoma de Cd. Juárez, from February to May 2006.
7. Recruiting trip, Univ. Autónoma de Baja California, Ensenada, BC, Mexico, 11/23-25/2005.
8. Attendant to "Conacyt Science Fair ", Mexico City, Mar. 4-7, 2005.
9. Attendant to "Conacyt Science Fair ", Mexico City, Mar. 5-7, 2004.
10. Recruiting trip, University of Sonora, Hermosillo, Sonora, Mexico, Nov. 24-25, 2004.
11. Organizer of "Ciencia de frontera", a series of 17 weekly talks for high school student from Ciudad Juarez, Mexico, at the Universidad Autónoma de Cd. Juárez, from September to December, 2004.
12. Seminar: "Physics of Halloween", delivered to 220 high school students at the series of talks "Ciencia de frontera", Universidad Autónoma de Ciudad Juárez, 11/1/2003.
13. "The Physics Circus", presented to the faculty and students of the Universidad Autónoma de Cd. Juárez, with C.H. Cooper, at the "Semana de Ingeniería 2003", 9/10/2003.
14. Organizer of "Ciencia de frontera", a series of 17 weekly talks for high school student from Ciudad Juarez, Mexico, at the Universidad Autónoma de Cd. Juárez, from August to December, 2003.
15. Seminar: "Halloween", delivered to 220 high school students at the series of talks "Ciencia de frontera", Universidad Autónoma de Ciudad Juárez, 11/1/2003.
16. "The Physics Circus", Univ. Autónoma de Cd. Juárez, 9/10/2003.
17. Workshop: "The Physics Circus", Univ. Autónoma de Cd. Juárez, 9/11/2003.
18. Attendant to "Conacyt Science Fair", Mexico City and Guadalajara, Mexico, May 8-13, 2002.
19. Visit to five "preparatorias" in Juarez City, May, 2002.
20. Visit, to Universidad Autonoma de Colima, in Colima, Mexico, to promote our M.S. Physics program, with Dr. Tom Brady, November 17-20, 2003.
21. Attendant to "Conacyt Science Fair", Mexico City, Sept. 9-12, 2001.
22. Recruiting Trip to Mexico, a 2-week trip to 11 Mexican institutions in 8 cities, May-Jun. 2000.
23. Visit to four preparatorias in Juarez City, May, 2000.
24. Recruiting Trip to Mexico, a 2-week trip to 11 Mexican institutions in 8 cities.
25. Recruiting Trip to Mexico, a 2-week trip to 11 Mexican institutions in 8 cities, May 1998.
26. Science Presentations. Many school visits for telescope observations, physics demonstrations, etc. Eastwood Heights Elementary School, and other schools in Ysleta and Socorro ISD. 1997-1999
27. Group Visit of High School Students and Teachers, Accelerator Facility, U. North Texas, 5/1-3/1997, Denton, TX.

28. Visit to Minority Students in Moorehead, Minnesota, Mar. 27-29, 1995.
29. Advisor of High School student Adriana Gallegos, UTEP's LIFT-OFF program, summer 1995.
30. Visit to two preparatorias in Juarez City, May, 1995.
31. "Physics Circus", 1993 SACNAS Annual Conference, Albuquerque, 1-14 to 1-18, 1993.
32. "Fisica en UTEP", Universidad Autonoma de Nuevo Leon, May 20, 1993, Monterrey, Mexico.
33. Visit to two preparatorias in Juarez City, May, 1993.
34. "Recruiting Seminar ", Universidad Nacional Autonoma de Mexico, May 26, 1992.

NASA Physics Centers Activities

35. Supervision of six Physics Centers in Socorro, Andress, Jefferson, Del Valle, El Paso and Fabens high schools.
36. Physics Newspaper.
37. Presentation by NMSU's Reta Beebe, November, 96.
38. Presentation at UTEP of Nobel Laureate Leon Lederman, May, 1996.
39. Presentation at UTEP of Jet Propulsion Lab's Sami Asmar, October, 1996.
40. Physics Open House, October 23, 1996. With 250 hot dogs cooked!
41. Viewing of lunar eclipse, Del Valle High School, 9/26/96.
42. Presentation at UTEP of CalTech's Kip Thorne, April 25, 1995.
43. Physics Open House, April 25, 1995.
44. Telescope night at five high schools, 9/95.
45. Creation of six Physics Centers in Socorro, Andress, Jefferson, Del Valle, El Paso and Fabens high schools. Centers are responsible for physics tutoring, etc. Fall 94.
46. Presentation at UTEP, Andress and Jefferson H.S. by Ginger Kerrick, NASA Johnson Space Center, 1-23-94.
47. Telescope night at five high schools, 9/94.

Society of Physics Students Activities

48. Lunch seminar by Ben Zeidman, Argonne Nat. Lab., 10/1996.
49. Lunch seminar by Richard Gomez, US Army Corp of Eng., 10/96.
50. Student Seminars by Sergio Chaparro, Mike McKay and Ken Pane, 5/1996.
51. Tutoring for 4210, 4211 and 3325, Spring 1996. Lunch seminar by Ben Zeidman, Argonne Nat. Lab., 9/1995.
52. Student Seminars by Raul Armendariz, Jaime Morales and Richard Coronado, Fall 1995.
53. Tutoring for 4210, 4211 and 3325, Fall 1995.
54. Student Seminars by Alfredo Aranda, Tim Robinson and Zehua Wu, Spring 1994.
55. Tutoring for 4210, 4211 and 3325, Fall 1994.
56. Creation of a library. Fall 1994.
57. Lunch presentation by Ben Zeidman, Argonne National Lab., 9-14-94
58. Lunch presentation by Warren Buck, Hampton University, 9-21-94
59. Lunch presentation by Jolie Cizewski, Rutgers University, 9-29-94
60. Student Talks by Gildardo Rivas, Mario Borunda, and Alfredo Aranda, 3-3-94.
61. Trip to McDonald Observatory, 11-94.

"The Physics Link" Activities

62. Presentation by Reta Beebe, 5-9-94.
63. Observation of Solar Eclipse (over 2000 participants), 5-10-94.
64. Pin-Hole Camera Contest, 5-13-94.
65. Summer Research Program (12 participants), June 1993.

- 66.** Hot-Air Balloon Contest, 11-20-94
- 67.** Presentation by Robert Liefeld, 11-20-94.
- 68.** Presentation by Robert Liefeld, 4-14-93.
- 69.** Hot-Air Balloon contest, 5-13-93.
- 70.** Summer Research Program, (24 participants), June 1993.
- 71.** Field Trip to White Sands Missile Range, 6-26-93
- 72.** Presentation by Reta Beebe, 10-28-93.
- 73.** Observation of Lunar Eclipse, 11-28-93.
- 74.** Photo Contest of Lunar Eclipse, 12-1-93.

TEACHING

Dr. Lopez has taught physics courses at all levels, supervised BS, MS and PhD students, modified curricula and develop teaching material for university and pre-college levels, especially for pre-K. Has written journal articles on educational topics, and has requested and obtained funds for educational activities. Additionally has created educational programs within the University, with local school districts and with other universities.

SYNERGISTIC ACTIVITIES

- Member of Physics Undergraduate Research Exposure. For the development of "Python Physics Programs" for PHYS 2420, to introduce students to coding and data science, funded by UTEP's Associate Provost, 2021 - 2022.
- Creation of a Nuclear Physics Lab. For the development of a nuclear Physics lab for PHYS 3243, to teach nuclear physics, funded by the Department of Energy, 2021 - 2022.
- An Integrative Science Success, Teaching and Retention Program for STEM Education. Project (funded by NSF) in which Dr. Lopez, along with faculty from Chemistry, Engineering and Education, introduced undergraduate students as Peer Leaders in the teaching of calculus-based physics courses.
- Partnership for Enhancing Teacher Education. Seminal project (funded by NSF) in which Dr. Lopez merged his physical science course for education majors with a science methodology course of the College of Education and moved it to the elementary schools. These courses were taught at eight schools in the El Paso area using inquiry-based teaching and constructivist methodologies. This project was recognized by Time magazine in the Jan. 8, 2001 article "The New College Try", <http://www.time.com/time/magazine/article/0,9171,998911-1,00.html>.
- Distance-Learning Physics MS program with UT Brownsville. To help the University of Texas at Brownsville develop its own MS program, Dr. Lopez and UTB's Dr. Mario Diaz designed a distance-learning program to allow UTB have graduate students taking courses remotely by cable in real time. The program benefitted approximately ten students and lasted four years until UTB's MS program was approved.
- Cooperative program with Universidad Autonoma de Cd. Juarez. To help the Univ. Autonoma de Cd. Juarez develop its own physics program, Dr. Lopez designed a cooperation program that allowed UACJ's students take physics labs at UTEP; Dr. Lopez alleviated the lack of faculty by teaching Modern Physics and Quantum Mechanics *pro bono publico*.
- Cooperative program with Universidad Autonoma de Colima. To help the Univ. Autonoma de Colima (UAC) develop its own physics program, Dean Thomas Brady, Dr. Lopez and Dr. Alfredo Aranda started a program that allowed UAC's faculty supervise UTEP MS physics students; the program also allowed the exchange of students in the summer.
- Development of new programs. Participated actively in the processes leading to the creation of the Ph.D. program in Computational Science and in the physics concentration in medical physics.

COURSES TAUGHT

1. ASTR 1308 Stars and Galaxies (every semester from Fall 2013 to Fall 2017)
2. PHYS 1404 General Physics II (from Fall 2013 to Fall 2017)
3. PHYS 2421 Fields and Waves (from Fall 2008 to 2014)
4. PSCI 2303 Physical Science I (Fall 2001, Spring 2002)
5. PHYS 2477 Intro to Physics (Fall 94)
6. PSCI 3304 Physical Science II (Spring 98, Fall 98, Spring 99, Fall 2000)
7. PHYS 3325 Survey of Modern Physics (Spring 94 and 96, FALL 1997, 2002, 2003, 2004)
8. PHYS 3457 Nuc. Part. & Rel. (Spring 95)
9. PHYS 4103, Lab (every Fall from 1990 to 1992)
10. PHYS 4104 Lab (every Spring from 1991 to 1993)
11. PHYS 4210 Mechanics and thermal physics (Fall 90)
12. PHYS 4211, Field and Waves (Fall 91, every semester from Spring 93 to spring 1996 plus Spring 97)
13. PHYS 4342 Electromagnetics II (Spring 2007)
14. PHYS 4355 Intro to Quantum Mechanics (Fall 2004)
15. PHYS 4357 Relativity Nuclear and Particles (Spring 2005)
16. PHYS 4341 Electromagnetics I (Fall 2003)
17. PHYS 4356 Atoms, Molecules and Solids (Fall 2003)
18. PHYS 5195 Graduate Seminar (Every semester from Spring 2002 to Fall 2007)
19. PHYS 5321, Mechanics (Spring 92)
20. PHYS 5325, Math Physics (Fall 92, 93, 94, 95, 96, 97, 98, 99)
21. PHYS 5341 Electrodynamics (Spring 91, every Spring from 2005 to 2007, Spring 2013)
22. PHYS 5365 Advanced Statistical Physics (every Fall from 2003 to 2007)
23. MASE 6402/MME5401 Mat. Characterization (from Fall 2010 to 2014)

DIRECTION OF DISSERTATIONS AND THESES

Postdoctoral Researchers

1. Carlos Diaz Moreno, from 3/2015 to 8/2017.

Ph.D. Dissertation

1. Mario Borunda, Ph.D. at Mexico's Instituto Politecnico Nacional, defended on Nov. 26, 1997.

MS Theses

1. Daniela Ramirez Chavez, "Alpha shapes classification of nuclear pasta", May 2022 (expected).
2. Michel Luna, "Measurement of Radon Gas at Kilbourne Hole", Nov. 19, 2021.
3. Oscar Lopez Lopez, "Modelación por el método de Monte Carlo del daño por rayos X en compuestos tipo ATiO₃", I was the external advisor, the local advisor was Dr. Maria Elena Montero, Centro de Materiales Avanzados, Chihuahua, Chih., Mexico, Sep. 2, 2021.
4. Adrián Gaytán Terrazas, "Phase diagram of nuclear matter", Nov. 22, 2019. [See thesis here.](#)
5. Pamela Lara, "'Gravitational waves research at TOROS UTRGV", 7/27/2018. [See thesis here.](#)
6. Selim Romero, "Geant4 study of a gamma ray collimator for proton therapy", 5/9/2018. [See thesis here.](#)
7. Omar Hernández, "Geant4 study of proton-tissue interactions". May 8, 2018. [See thesis here.](#)
8. Nazia Sharmin, "XRF study of photovoltaic films", Aug. 2017. [See thesis here.](#)

9. Karla Tellez-Giron, "Neutrino oscillations", Aug. 2017. Now in PhD studies at Virginia Tech. College of Science Best Thesis Award 2017. [See thesis here.](#)
10. German Rodriguez, "Using Underground Radon To Detect Inactive Geological Faults", Aug. 2017. [See thesis here.](#)
11. Enrique Ramirez-Homs, "Study Of Electron Gas On A Neutron-Rich Nuclear Pasta", Aug. 2017. [See thesis here.](#)
12. Rodrigo Gamboa Goñi, "Dependence of isoscaling on the nuclear equation of state", 2007. PhD from Queen's U, England. [See thesis here.](#)
13. Christian Escudero, "Dynamical and geometrical aspects of isoscaling", two publications, May 2007. College of Science Best Thesis Award 2008. Ph.D. in Geology at UTEP, working at the University of Guadalajara in Puerto Vallarta. [See thesis here.](#)
14. Carlos Martínez, "AES-XPS study of a-carbon:nitrogen thin film deposited by laser ablation", Dec. 2006, co-supervised by Dr. W. Durrer. Now working in Industry in Mexico. [See thesis here.](#)
15. Karen Castrejón, May 2006, "The distribution of N electric charges in a linear wire". Earned a PhD in Materials Science at Universidad Autonoma de Ciudad Juarez, where she now teaches. [See thesis here.](#)
16. Jesus Saenz, May 2006, "The Fermi Integral". Earned a PhD at NMSU and now directs the Engineering Physics degree at Universidad Autonoma de Ciudad Juarez.
17. Armando Barrañon, M.S. degree in physics from Instituto Politecnico Nacional de Mexico, in May 2005, co-supervised with IPN's Dr. Fray de Landa. Was a professor at Universidad Autonoma Metropolitana in Mexico City for many years, died in 2014.
18. Luis Martin Sandoval, Aug. 2005, "The Linear Delta Expansion", earned a Ph.D. in Geology at UTEP and is now a researcher in Tuxtla Gutierrez, Mexico.
19. Jose Filadelfo Aguilar Andrade, Aug. 2005, now at the Benemerita Univ. de Puebla in Mexico.
20. Olienka de la O Fernández, Aug. 2005, Report: "A code for biophysics", attended summer school in biophysics in Montreal, Canada in 2004, Earned a MASE Ph.D. at UTEP and teaches at EPCC.
21. Sergio Yanuén Rodríguez, "Surface analysis of selective-area deposition of cadmium telluride via close-spaced sublimation", graduated in August 2004, in co-supervision with W. Durrer. Earned a Ph.D. at Texas A&M University and now works at Intel in Albuquerque. [See thesis here.](#)
22. Federico Lopez, August 2004, with W. Durrer. Earned a Ph.D. at Texas A&M University and now works at Intel in Portland.
23. Luis Basurto, graduated in December 2004, one oral presentation at the meeting of the Mexican Society of Physics in 10/2004. Earned a Ph.D. in Computational Science at UTEP and is now a postdoctoral researcher at UTEP.
24. Jesús Escamilla Roa, M.S. degree obtained in May 2003. Two publications, student presented his work at the V Latin American Symposia in Santos, Brazil (poster, 9/2003). Ph.D. from Vanderbilt University in 2008 and is now a professor at the Universidad Autonoma del Estado de Hidalgo.
25. Rafael Cárdenas, M.S. Degree, May 2002. Ph.D from Texas Christian U. in 12/2007.

26. Miguel Castro Colin, M.S. May 1998. Completed Ph.D. studies at U. Houston in 2004, now at Bruker in Germany.
27. Milijana Sukavcevic, M.S. May 1998. EDD from UTEP, 2003 now at Rice University.
28. Batu Batu, M.S. May 1998. Employed by the State of Minneapolis.
29. Xiaofang Mu, M.S. May 1998. Earned a Ph.D. studies in Computer Engineering at UTEP and works in Apple in Santa Clara, CA.
30. Xiaoyu Wang, M.S. Aug. 1996. Completed Ph.D. studies in Canada.
31. Tim Robinson, M.S. May 1996, "Breakup of Small Nuclei ". Went for Ph.D. studies to Texas A&M University, now employed as high school teacher In Tahiti.
32. Zehua Wu, M.S. May 1996, earned an M.S. in computer science at U. Houston.
33. Raul Armendariz, M.S. August 1996, "The Search for Gravity Waves". College of Science Best Thesis 1996, JPL Cuesta Fellow from 1994 until 1996. Earned a Ph.D. at New Mexico State University and now is a professor at a CUNY campus.
34. Ganesh Thondikulam, M.S. 8/1995, "Phase shifts of NN scatterings", employed in computing in the insurance industry in Washington State.
35. Gildardo Rivas, M.S. August 1994, "The use of autocorrelation in the search for periodicities in spacecraft Doppler data as applied to gravity wave detection". Ph.D. at U. Washington, Seattle, 3/2004, now a professor at UACJ.

BS Thesis

1. Danna Michelle Acosta Cázarez, "Estudio de los fenómenos de oxidación en capas de disulfuro de molibdeno (MoS₂)", co-supervised with Dr. Manuel Antonio Ramos Murillo, B.S. in Engineering Physics, Universidad Autonoma de Cd. Juárez, 7/May/2021. [See thesis here.](#)
2. Israel Chavarría, "Radon measurements of the Franklin Mountain Fault", 5/2017. M.S. in medical Physics, now working for the State of Texas.
3. Adrián Gaytán Terrazas, "Phase diagram of neutrón-rich nuclear matter", co-supervised with Dr. Sergio Terrazas, B.S. in Engineering Physics, Universidad Autonoma de Cd. Juárez, 8/May/2017.
4. Aracely Rodriguez, "Phase diagram of neutrón-rich nuclear matter", co-supervised with Dr. Sergio Terrazas, B.S. in Engineering Physics at the Universidad Autonoma de Cd. Juarez, 11/2015.
5. Rodolfo I. Gonzalez, "Isospin Asymmetric Nuclear matter", 2014. Completed MS studies in EE at UTEP, is now a HS teacher.
6. Enrique Ramirez-Homs, "XRF studies of Pueblo Indian ceramics", 2014.
7. Mario Bencomo, "Metallic Out-Diffusion Quantification in Polymers", 2009 to 2010, PhD in physics at Texas A&M, Postdoc at Livermore NL, now with Raytheon in Tucson, AZ.
8. Manuel Antonio Ramos, "Nuclear Fragmentation" and "Surface studies", B.S. degree awarded in 12/2003. Completed Ph.D. studies in Materials Science at UTEP and is now a professor at Universidad Autonoma de Cd. Juarez.

SUPERVISION OF UNDERGRADUATE RESEARCH

1. Leonardo Chavez, 2021 to date.
2. Massiel Velarde, 2021to date.

3. Jacob Mireles, 2020 to date.
4. Jahayra Chairez, 2020 to date.
5. Danna Michelle Acosta Cázares, 202, UACJ.
6. Diana Carrasco-Rojas, 2019 to date.
7. Yahir Garay, 2017 to 2021.
8. Erik Armendariz, 2019 to 2020.
9. Jeremiah Lopez, Summer 2017.
10. Víctor Lizárraga Rubio, U.A. Sinaloa, Sum. 2017.
11. Adrian Gaytán Terrazas, 2016 to 2017, UACJ.
12. Alan Salcedo Gomez, 2016 to 2017.
13. Israel Chavarría, 2016 to 2017.
14. Enrique Ramirez Homs, 2009 to 8/2015.
15. Aracely Rodriguez, 2014 to 2015, UACJ.
16. Rodolfo Gonzalez, 2012-2014
17. Manuel Oscar Saenz, 2010 to 2011.
18. Juan García, 2009 to 2010.
19. Jorge Muñoz, 2005 to 2008.
20. Alán Dávila, 2002 to 2006.
21. Christian Escudero, 2000 to 2005.
22. Antonio Ramos, 2001 to 2002.
23. Manuela Ortiz, 2001 to 2003.
24. Yazmín Domínguez, 2001 to 2003.
25. Azael Ávalos, 2000 to 2002.
26. Martha Navarro, 1998 to 2001.
27. Fabian Botello, summer of 1998.
28. Miguel Cortez, 1997 to 1998.
29. Karina Apodaca, 1997 to 1998.
30. Jose Ricardo Correa, 1997 to 1998.
31. Mario F. Borunda, 1997 to 2003.
32. Carlos Velasco, 1995 to 1996.
33. Rocio Gisel Olave, 1995 to 1998.
34. Richard Coronado, 1995 to 1997.
35. Jaime Morales, 1995 to 1998,.
36. Mike Carroll, 1994 to 1995.
37. Raul Medellin, 1994 to 1996.
38. Francis C. Hoyt, summer 1994.
39. Veronica Alvarado, 1993 - 1994.
40. Alfredo Aranda, 1993 to 1996. .
41. Mario Borunda Sr., 1992 to 1994. .
42. A. Guarnero, Fall 1991.
43. F. D. Guzman, Summer 1991.
44. Arturo Revilla, 1991 to 1992.
45. Jose Ramirez, 1990 to 1991.
46. Jose Lozano, fall 1990

SUPERVISION OF HIGH SCHOOL STUDENTS

1. Ashley Chacon, Fall 2017
2. Andrea Valdez-Rivas, Franklin HS, Summer 2017
3. Alejandra Robles, Franklin HS, Fall 2012 (now in PhD in Chemistry at U. Houston)
4. Brianna Rayos, Transmountain Early College HS, Fall, 2014
5. Luisa Gonzalez, Transmountain Early College HS, Fall, 2014
6. Daisy Ramos, Transmountain Early College HS, Fall, 2014

THESIS COMMITTEES

1. Jissel Arroyo Meneses, member of Creative Writing MS thesis committee, Dr. Cesar Rossatto, 4/27/2020.
2. Osvaldo Rodriguez, member of Chemistry PhD dissertation committee, Dr. Carl Dirk, 2019
3. Angel Aguero, member of Mathematics MS thesis committee, Joe Guthrie, 5/17/2019
4. Jayalath Abeywardhana, member of Computational Sci. PhD dissertation committee, Dr. R. Ravelo, 8/9/2018.
5. Luis Suarez Salas, member of math BS thesis committee, Dr. Osvaldo Mendez, 15/10/2018.
6. Adolfo Danilo Lopez, member of Master of Fine Arts thesis committee, thesis presented on 12/5/2017.
7. Brenda Arellano, member of MASE PhD dissertation committee, Dr. S. Stafford, thesis defense on 13/4/2017.
8. Jose G. Siqueiros, member of MASE PhD dissertation committee, dissertation proposal 8/3/2017, defense 4/14/2018. Dr. David Roberson. [See dissertation here.](#)
9. Jose A. Gonzalez, member of MASE PhD dissertation committee, Dr. R. Wicker, 8/8/2017.
10. Punam Ghimire, member of Physics MS thesis committee, Dr. R. Ravelo, 5/2015.
11. Olienka de la O Fernandez, member of Mat. Sci. & Eng. PhD thesis committee, Dr. R Chianelli, 5/1/14.
12. Nayeli Camacho, member of Mat. Sci. & Eng. PhD thesis committee, Dr. S. Stafford, 12/2012.
13. Karina Puebla, member of Mat. Sci. & Eng. PhD thesis committee, Dr. L. Murr, 5/2012.

14. Sara Gaytan, member of Mat. Sci. & Eng. PhD thesis committee, Dr. L. Murr, 5/2011.
15. Manuel Ramos, member of Mat. Sci. & Eng. PhD thesis committee, Dr. R. Chianelli, 12/2010.
16. Cesar Santos, member of Mathematics MS thesis committee, Dr. L.G. Valdez, 5/2009.
17. Enrique Díaz, member of Physics MS thesis committee, Dr. A. Aranda, 5/2009.
18. Oscar Dena, member of Geology Ph.D. dissertation committee, Dr. D. Doser, 2/7/2008
19. Hector Garcés, member of EE Ph.D. dissertation committee, Dr. B. Flores, Jan. 2007
20. Matías Ison, member of Physics Ph.D. dissertation committee, 4/26/2006, Dr. C. Dorso, Universidad de Buenos Aires, Buenos Aires, Argentina.
21. John Olgin, member of Physics MS thesis committee, Dr. P. Mason, defense 5/2006
22. José Valadez, member of Physics MS thesis committee, Dr. A. Aranda, 5/2/2005.
23. Osvaldo Rodriguez, member of MASE Ph.D. dissertation committee, Dr. C. Dirk, 11/2005.
24. Leticia Sifuentes, member of Computer Science MS thesis committee, Dr. A. Gates, 8/2003
25. Hector Gonzalez Huizar, member of MS Physics thesis committee, Dr. V. Smith, defense 8/2003
26. Roberto Arceo, member of MS Physics thesis committee, Dr. R. Lopez, 5/2003
27. Alejandro Lugo, member of MS Physics thesis committee, Dr. R. Lopez, 5/2003
28. Pablo Balenzuela, Ph.D. member of Physics Ph.D. dissertation committee, Dr. C. Dorso, Universidad de Buenos Aires, Buenos Aires, Argentina, 11/2002.
29. Gopi Krishna Manne, member of ECE MS thesis committee, Dr. S. Cabrera, 12/2002.
30. Miguel Delgado, member of Geology MS thesis committee, Dr. P. Goodell, 12/2002.
31. Hector Garcés, member of ECE MS thesis committee, Dr. B. Usevitch, 10/2002.
32. Miguel Angel Sagarnaga, member of ECE MS thesis committee, Dr. C. Dirk, 9/26/2002.
33. Albert Peralez, member of Chemistry thesis committee, Dr. Williams, 9/26/2002.
34. Alejandro Puga, member of MS Physics thesis committee, Dr. P. Cole, 11/2001.
35. Charlie Torres, member of MS Physics thesis committee, Dr. M. Díaz, UT Brownsville, 11/2001.
36. Leandro Trevino, Ph.D. Geology, Dissertation proposal 12/2001.
37. Shu Chan, member of ECE MS thesis committee, Dr. S. Cabrera, 11/99.
38. Gabriel Thomas, Ph.D. Dissertation Committee, Elec. and Comp. Eng., 12/1998.
39. Jae Sok Son, Elec. Ph.D. Dissertation Committee, Comp. Eng., 12/1998.
40. Roberto Gabaldon, member of ECE MS thesis committee, 12/98.
41. Anthony Smith, member of MS Physics thesis committee, 8/1998
42. Rodrigo Mendoza, member of ECE MS thesis committee, 12/97.
43. Javier Vega-Pineda, member of ECE Ph.D. dissertation committee, 12/1997.
44. Gabriel Osorio, member of ECE MS thesis committee, 7/97.
45. Raymundo Olague, member of Exam Committee, MS Mech. & Ind. Eng., 12/96.
46. Jesus Del Villar, member of ECE MS thesis committee, 12/96.
47. Jose de la Rosa, member of ECE MS thesis committee, 12/96.
48. Aldo Lucero, member of ECE MS thesis committee, 5/95.
49. Chiouguey Joyce Chen, member of ECE MS thesis committee, 12/1994.
50. Sergio A. Chaparro, member of MS Physics thesis committee, Dr. Drucker Phys. Dept., 12/1994.
51. Rajendra Kumar, member of Mech. & Ind. Eng MS thesis committee, 12/1993.
52. Gabriel Thomas, member of ECE MS thesis committee, Dr. B. Flores, 8/1993

CURRICULUM DESIGN AND TEACHING MATERIAL

University Level

- PHYS 2421. Development of podcasts (MP4 and WMV) for lecture delivery, 2009, supported by STEP UP NSF grant.
- PHYS 2420/2421. Modification of content, development of teaching materials, in-class demos, and introduction of Peer Leaders, 2007- 2008, supported by STEP NSF grant.
- PHYS 3441 Electromagnetism. Modification of content and new teaching material, 2006.
- PHYS 3331 Thermal Physics. Modification of content and development of teaching material of PHYS 3331 in support to new faculty Dr. Tunna Baruah, Fall 2005.
- PHYS 3243: Radio Astronomy. A radio telescope designed and constructed for PHYS 3243, with Luis Basurto, 2005.
- PHYS 3325: Modern Physics. In-class demo "Bohr Model Spectroscopy", with elaboration of pre- and post-exams, in collaboration with lecturer Jaime Morales. Fall 2004. Tested in two Modern Physics Courses.
- Survey of Modern Physics. Introduction of web and powerpoint material for the teaching of PHYS 3325, Fall 2003.
- Alpha PIXE Spectroscopy. In-class demo for modern physics 2002. Tested in two Modern Physics classes in 2002.
- Modern Physics. Testing of three computer simulations to add an interactive component to the modern physics. With physics students Manuela Ortiz and Jazmin Dominguez. Testing occurred in 2001-2002.
- PHYS 5325. Design of distance-learning course and web-based material for UT Brownsville students, Fall 1999.
- UTEP-UT Brownsville Distance Learning Masters Program. Proposer, designer and director of the program. Memorandum of understanding reviewed in 2000, first graduate in 2002, second one in 2004.
- Termodinámica Nuclear. Preparation of a two-week course in Spanish for the 2nd Mexican Nuclear Physics School at Universidad Nacional Autónoma de México, Mexico City, 4/2001. Lecture notes published in a book.
- PSCI 3304. Design of course team-taught to education majors at Marion Manor Elementary in conjunction to ELED 3311. Fall 2000.
- Physical Science, introduction of science kits for elementary school in the class PSCI 3304, 1998.
- Modern Physics. Development of computer simulations to add an interactive component to the course Phys 3325.
- Nuclear, Particles and Relativity. Development of the curriculum for the new class Phys 3457. New physics course to use basic quantum mechanics to study applications in nuclear and particle physics. Relativistic kinematics was introduced. Spring of 1995.
- Computational Physics. To develop a computer laboratory with funding from the College of Science and from an IBM donation to the Physics Department, 1994.
- Introduction to Physics. Development of the curriculum for a new class Phys 2477. New physics course to introduce freshman physics majors to physics concepts and physics as a career. Fall 1994, 9 students.
- "Experiments for General Physics 4104", J. A. Lopez, Burgess International Group, 1994.
- "Experiments for General Physics 4103", J. A. Lopez, Burgess International Group, 1993.

Pre-K to 12 Level

- PHYS 2421. Development of podcasts (MP4 and WMV) for lecture delivery, 2009, supported by STEP UP NSF grant.

- Middle School Physics, Material for a two-day workshop for UTEP's MSP Staff Developers, 12/2005.
- Deepening Science Knowledge for High School Physics Teachers. Printed and Powerpoint material for a two-day bilingual workshop for teachers, 20 pages, July, 2005.
- Physics for Pre-K and K Students – Bilingual Seminar for Teachers. Printed and Powerpoint material for a bilingual seminar for teachers, 80 pages, June, 2005.
- "Universo - Almanaque Celestial 1996", published by McDonald Observatory of the University of Texas, 1/1/96. Contributed as technical editor.
- "Universo - Almanaque Celestial 1997", published by McDonald Observatory of the University of Texas, 1/1/96. Contributed as technical editor.
- "Universo" Compact Disks Audio material for general audiences. Pressed monthly describing the skies for many high schools and radio stations in the United States. Pressed by UT Austin/McDonald Observatory since the Fall of 1994. Contributed as technical editor. Since the Fall of 1994 to 2010, and in 2014.
- "La enseñanza de la física en pre-escolar", Activity guide prepared for a workshop on the "V Encuentro Estatal de Educación", Dirección de Educación Elemental del Gobierno del Estado de Chihuahua, Ciudad Juarez, Chihuahua, Mexico, April 12, 2003, in Spanish.

FACULTY DEVELOPMENT ACTIVITIES ATTENDED

- Exemplary Course Program, Learner Support, Blackboard, 4/1/2021. [See the recording here.](#)
- Exemplary Course Program, Assessment Design, Blackboard, 3/31/2021. [See the recording here.](#)
- Guide to Building Mobile Content, Blackboard, 3/24/2021. [See the recording here.](#)
- 2021 UT System Academy of Distinguished Teacher's Conference on Teaching in Texas, 4/7/2021. [See the recordings here.](#)
- Webinar: Exam Security, Problem Authoring, Tracking Academic Dishonesty, Expert TA, 3/16/ 2021. [See the recording here.](#)
- 1 hour phone conversation about the Expert TA Homework Service for Astronomy, 12/15/2020.
- WebAssign OpenStax Astronomy & Physics Demo, 1-hour web meeting, 12/14/2020.
- Auger Electron Spectroscopy - Fundamentals and Applications Webinar, PHI Physical Electronics, 9/10/2020.
- NASA Research Funding Information and Networking Opportunities Workshop for Minority Serving Institutions, QEM Networks, 5.5-hour meeting, 8/27/2020.
- TeachTech OER Meeting, UTEP – TeachTech, 1.5 hour web meeting, 8/11/2020.
- Secure Online Testing, Expert TA and OpenStax, 1.5 h web meeting, 7/14/2020.
- Meeting with PNNL to study possible collaboration, Pacific Northwest National Laboratory, 2-hour meeting, 7/9/2020.
- Spotlight on National Labs: Pacific Northwest National Laboratory, Pacific Northwest National Laboratory, 2-hour meeting, 7/1/2020.
- Blackboard Grade Center: Overview and Gradebook Set-Up, UTEP – Blackboard, 6/29/2020.
- Blackboard Course Copy: Recycle Your Blackboard Course, UTEP – Blackboard, 6/26/2020.
- Blackboard Assignments: Deliver Coursework, Set Up Discussions & Grade, UTEP – Blackboard, 6/25/2020.
- EASE Alumni Webinar - International Learning and Teaching, EASE Alumni, 6/25/2020.
- Blackboard Tests: Deliver Assessments, Proctor & Grade, UTEP – Blackboard, 6/24/2020.
- Webinar: Blackboard Collaborate: Host Virtual Class Meetings & Office Hours, UTEP – Blackboard, 6/23/2020.

- Blackboard Essentials: Upload Course Files, Organize & Communicate, UTEP – Blackboard, 6/22/2020.
- Reaching Out to Your At-Risk Students: Blackboard Retention Center, UTEP – Blackboard, 6/18/2020.
- InCREASE - Unpacking CARES Act Research and Funding Opportunities, Rowan U., 4/16/2020.
- Instructor Training for LockDown Browser & Respondus Monitor: Prevent Cheating During Online Exams, Respondus, 3/27/2020.
- Teaching Remotely with Blackboard Learn and Collaborate Office Hours, Blackboard, 3/27/2020.
- Transitioning Face-to-Face Physical Science & Integrated Science Courses to an Online Environment, NAVSTEM: Physical Science & Integrated Science, 3/24/2020.
- Using TurningPoint for Summative Exams, Turning Technologies, 2/26/2020.
- Unexpected Techniques that Unleash Student Engagement, McGraw-Hill, 2/20/2020.
- Strategic Approaches to PowerPoint Polling, Turning Technologies, 11/6/2019.
- Cengage: Virtual Science Symposium, Cengage, 10/23-24/2019.
- Respondus + Blackboard, Respondus, 10/18/2019.
- Prevent Cheating During Blackboard Exams, Blackboard Partnerships, 10/3/2019
- PHI WEBINAR SERIES: Electronic Band Structure Characterization using LEIPS & UPS on MultiTechnique XPS, PHI Perkin Elmer, 10/3/2019.
- E-Exams in Blackboard, UTEP: Blackboard Central, 9/19/2019.
- Mentoring Matters Workshop: “Mentorship Diversity”, UTEP: Center for Faculty Leadership and Development, 2/28/2019.
- Getting the Most out of iClicker Attendance, Macmillan/The iClicker Team, 2/15/2019.
- Assessment Matters: Selecting the Right Measures, UTEP: Center for Faculty Leadership and Development, 2/12/2019.
- Blackboard Retention, UTEP - Technology Support, 10/23/2018.
- CRS-iClicker Cloud/Reef training, UTEP - Academic Technologies - Technology Support, 8/22/2018.
- Large Class Seminar, UTEP - Technology Support, 9/13/2016, 10/12/2016.
- Office Mix Workshop, UTEP - Academic Technologies - Technology Support, 5/10/2016.
- Blackboard SafeAssign Workshop, UTEP - Academic Technologies - Technology Support, 4/28/2016.
- Blackboard Collaborate Workshop, UTEP - Academic Technologies - Technology Support, 3/23/2016.
- Hearing Officer Training, UTEP - Office of Student Conduct, 8/6/2015.
- Teaching with Video Game Design, Stella Quiñones, Academic Technologies, May, 13, 2015.
- Online Science Labs Mastery Series, The Sloan Consortium, March 7 – May 9, 2014
- Follow Me Workshop, UTEP CETAL, April 21, 2014
- Online Program Readiness Workshop, Pearson, UTEP CETAL, February 12, 2014
- Faculty Led Modules for Teaching Online, UTEP Instructional Support Services, November 6, 2013
- Blackboard 9.1 Learning Management System Workshop, UTEP Instructional Support, Nov. 6, 2013
- Workshop, DreamWeaver CS6, CETAL, November 2012
- Workshop, Large Class Workshop, CETAL, September 2012
- Workshop, Large Class Workshop, CETAL, October 2012
- Interdisciplinary Consortium for Research and Educational Access in Science and Engineering (INCREASE), Synchrotron Science Workshop, Stanford University – SLAC, July 11- 13, 2011
- University Physics Conference, McGraw Hill, Napa Valley, CA, February 25 - 28, 2010
- Course Design Workshop, CETAL, January 27, 2010
- Peer Led Team Learning Workshop, University of Colorado at Boulder, 2009
- Flash Simulations Workshop, CETAL, December 2009
- Class Response Systems Workshop, CETAL, September 2009

RESEARCH

Dr. Lopez has performed research on nuclear physics, gravity waves, astrophysics, physics education, pre-K science teaching, materials science, and applications of scientific methods to social sciences including political science, anthropology and cultural heritage. Has had collaborations with researchers in Berkeley, CA, Buenos Aires and several institutions in Mexico. Has edited and written books and journal articles on research topics, has obtained funds for research activities, and organized regional, national and international meetings. In particular, he played a key role initiating the Latin American Symposium on Nuclear Physics and Applications, and in founding the Division of Radiation Physics of the Mexican Society of Physics.

SYNERGISTIC ACTIVITIES

- Reconstruction of the materials characterization laboratory. Project funded by The Department of Defense (2003) and Army Research Office (2016) to purchase surface physics research equipment such as Auger/XPS/SIMS spectroscopy (PHI 5600) and AJA Orion 5 sputtering PVD, refurbish PHI 560 ESCA/SAM Perkin Elmers; to date seven MS students have graduated with research based on such equipment.
- Latin American Symposium on Nuclear Physics and Applications. Invited by Dr. Laszlo Sajó Bohus (Universidad Simón Bolívar, Caracas, Venezuela) in 1995, Dr. Lopez participated in the creation and strengthening of the Symposium. The Symposium has been held in Venezuela, Colombia, Mexico, Brazil, Argentina, Peru, Chile, Ecuador, Uruguay, Colombia for a second time, and Cuba.
- Division of Radiation Physics of the Mexican Society of Physics. Invited by Drs. Efraín Chávez and Guillermo Espinosa (Universidad Nacional Autónoma de México) in 2003, Dr. Lopez participated in the creation and strengthening of the Division, and was the President from 2014-2016. The Division has organized meetings in Mexico City (three times), Chihuahua, Villa Hermosa, Zacatecas, Cuernavaca, Puebla, Tuxtla Gutiérrez and Cd. Juárez.
- Donation of research equipment. Thanks to direct intervention of Dr. Lopez, 1) valuable pieces of an accelerator were donated by Oak Ridge National Lab to Mexico's Instituto Nacional de Investigaciones Nucleares, 2) an electron accelerator was donated by Texas Christian University to New Mexico State University, and 3) a proton accelerator was donated by Sandia National Lab to New Mexico State University.

BOOKS

1. J. A. López Gallardo, "La Ciencia en El Paso del Norte", Kindle Unlimited, Scotts Valley, CA, 136 pages, Spanish, ISBN: 978-1719916585, Aug. 2018. [More information here](#).
2. J. A. López Gallardo, "Basta de fraudes electorales: 1988 - 2018", Plaza y Valdés, Mexico City, 244 pages, Spanish, ISBN: 978-6074029741, Aug. 2018. [More information here](#).
3. J. A. López Gallardo, "Estudios Científicos de Fraudes Electorales en México", Plaza y Valdés, Mexico D.F., 186 pages, Spanish, ISBN: 978-607-402-835-5, Jan. 2016. [More information here](#).

4. J. A. López and Hahnemann Ortiz, "Estudios Científicos del Fraude Electoral del 2012", CreateSpace Publishing, 216 pages, Spanish, ISBN: 978-1503161948. [More information here](#).
5. J. A. Lopez and M. Castro-Colin, "Introduction to Surface Spectroscopy", CreateSpace Publishing, ISBN 978-1483999968, 2013. [More information here](#).
6. J. A. Lopez, "2012 ¿Fraude Electoral? Estudios de los fraudes electorales en México", Universidad de Guadalajara, Guadalajara, Mexico, 2012. [More information here](#).
7. J. A. Lopez and C. O. Dorso, "Lecture Notes on Phase Transitions in Nuclear Matter", World Scientific, ISBN 981-02-4007-4, 10/2000, www.amazon.com/Lectures-Phase-Transformations-Nuclear-Matter/dp/9810240074.
8. J. A. Lopez, "2006 ¿Fraude Electoral? Estudios de las anomalías de la elección presidencial", Doble Hélice, Chihuahua, Mexico, 2009, ISBN 9786070011566, 208 pages. www.doblehelice.com.mx/Paginas/01229_2006_Fraude.html.
9. J.A. Lopez, "Experiments for General Physics 4103", Burgess International Group, 1993.
10. J.A. Lopez, "Experiments for General Physics 4104", Burgess International Group, 1994.

BOOKS EDITED

11. G. Espinosa, C. Vázquez and J. López Eds., Proceedings of the XI International Symposium on Radiation Physics, AIP Conf. Proc. 1671, 010001 (2015), ISBN: 978-0-7354-1318-4, DOI:<http://dx.doi.org/10.1063/1.4927175>, <http://scitation.aip.org/content/aip/proceeding/aipcp/1671>.
12. J.A. Lopez E. Chavez, M. Moshinsky and M.E. Borunda, Eds., Heavy Ion Phys., Vol. 16, 2002.
13. J.A. Lopez E. Chavez, M. Moshinsky, and M.E. Borunda, Eds., "Proceedings of the IV Latin American Symposium on Nuclear Physics", UACJ Press, ISBN 968-7845-36-8, September, 2001.

CHAPTERS IN BOOKS

1. J.A. Lopez, "Los fracasos de la caja negra", in book [El fracaso de la Política](#) by Samuel Schmidt, ASIN: B09N9ZNN6W. [See article here](#). 2021.
2. J.A. Lopez, "Análisis forense de la democracia", in book [¿Por qué fracasa la democracia?](#) by Samuel Schmidt, ISBN-13: 979-8528924250. [See article here](#). 2021.
3. J.A. Lopez, "La física del cambio social", in book [¿Por qué fracasa la izquierda?](#) by Samuel Schmidt, ASIN: B08JVNH2G, Sep. 22, 2020.
4. J.A. Lopez, "*Correlation between Violence and Forced Migration*", Chapter in book "*Latin American Geopolitics: Migration, Cities and Globalization*", Eds. César Álvarez Alonso and José Ignacio Hernández, Palgrave Macmillan, 978-3-319-99551-9, Feb. 2019. [See more information here](#).
5. J. A. Lopez, "Reacciones de Iones Pesados", Chapter 1 in "Notas, IV Escuela Mexicana de Física Nuclear", Eds. A. F. Aguilera, E. Hernandez, and J. Hirsch, Univ. Nacional Autónoma de México, 2005, Pp. 1-13.
6. J. A. Lopez, "Termodinámica Nuclear", Chapter 2 in "II Escuela Mexicana de Física Nuclear", Aguilera, Chavez, Hess, Eds., Universidad Nacional Autónoma de México Press, Mexico City, April, 2001, a book for a graduate level course on nuclear physics.

RESEARCH ARTICLES

1. Jorge A. Muñoz, Marcos A. García and Jorge A. López, Equilibrium constants of nuclear reactions in supernova explosions, submitted to International Journal of Modern Physics E, 12/12/2021. [See article here.](#)
2. Claudio O. Dorso, Guillermo Frank and Jorge A. López, Symmetry Energy and the Pauli Exclusion Principle, *Symmetry* 2021, 13(11), 2116; <https://doi.org/10.3390/sym13112116>.
3. Xiujun Li, Kaiqiang Hu; Yohannes W. Getahun; Lei Ma; Zonghua Wang; Olivia Fernandez-Delgado; Yahir E. Garay; Jorge A., Novel polyvinyl alcohol sponge-supported metal nanocatalysts on a microfluidic chip: a new continuous flow multi-reactor nanocatalysis platform for high efficiency and reusability catalysis, submitted to Journal of Hazardous Materials, 4/21/2021.
4. H Cein Mandujano, Sandra L. Gonzalez, Nathan Episcopo, Uma Sitharaman, Narayan Poudel, Krzysztof Gofryk, Yahir E. Garay, Jorge A. Lopez, Qiang Zhang, Stuart Calder, Harikrishnan S Nair, Absence of long-range magnetic order in lithium-containing honeycombs in the Li-Cr-Sb(Te)-O phases, *J Phys Condens Matter*. 2021 Jun 4;33(29). doi: 10.1088/1361-648X/abff90. [See article here.](#)
5. J.A. Lopez, "Los fracasos de la caja negra", *La Quincena* V. 205, Pp. 5-8, Nov. 2021. [See article here.](#)
6. J.A. Lopez, "Análisis forense de la democracia", *La Quincena* V. 199, Pp. 9-14, May 2021. [See article here.](#)
7. Lopez, J. A., Dorso, C. O., Frank, G., (2020). Properties of nuclear pastas. *Frontiers of Physics*, 16(2), 24301, 55 pages. <https://link.springer.com/article/10.1007/s11467-020-1004-2>
8. Lopez, J. A., Romero Gonzalez, S. S., Hernandez Rodriguez, O., Homes, J., Alarcon, R., (2021). GEANT4 Study of Proton-Body Interactions. *J. Nuc. Phys., Mat. Sci., Radiation and Applications*, 8(2), 1-7. [See article here.](#)
9. Schmidt, S., Lopez, J. A., (2020). RREE: Estudio de la elección para gobernador de Chihuahua de 2016. *Revista Mexicana de Estudios Electorales*, 4(24), 81-110. [See article here.](#)
10. Diaz-Moreno, C. A., Sosa, C., Martinez, L. M., Hurtado Macias, A., Singamaneni, S. R., Lopez, J. A., Magnetic behavior in Coltan from México. *Journal of Magnetism and Magnetic Materials*, 497 (2020) 165781 (Elsevier). <https://www.sciencedirect.com/science/article/abs/pii/S0304885319316312?via%3Dihub>
11. C.D. Tibambre-Heredia, H. Olaya-Dávila, A.C. Sevilla, S.A. Rahul Samasundaram, Jorge A. Lopez, S.A. Martinez-Ovalle, L. Sajo-Bohus, "Radon Progeny Recoil Effect in Retrospective Indoor Glass Dosimetry", *J. Nuc. Phys., Mat. Sci., Radiation and Applications*, 7 (1) 35-41. <https://jnp.chitkara.edu.in/index.php/jnp/article/view/195>.
12. M. Castro-Colin, E. Ramirez-Homs and J.A. López, *A data mining perspective of XRF elemental analysis of Pueblo peoples' pottery*, *J. Nuc. Phys., Mat. Sci., Radiation and Applications*, 7(2), 129 - 138. <https://jnp.chitkara.edu.in/index.php/jnp/article/view/213>
13. J.A. López, S.S. Romero González, O. Hernández Rodríguez, J. Holmes and R. Alarcon, *A GEANT4 study of a gamma-ray collimation array*, *J. Nuc. Phys., Mat. Sci., Radiation and Applications*, 7, 217-221, 2020. [See article here.](#)
14. J.A. López, J.A. Muñoz, C. Dorso, Frank, G., "Machine learning Minkowski functionals of neutron star crusts", *IOP Conference Series*, 1643, 012054, <https://iopscience.iop.org/article/10.1088/1742-6596/1643/1/012054>.

15. J.A. López, A. Gaytán Terrazas, S. Terrazas Porras, "Isospin-dependent phase diagram of nuclear matter", Nucl. Phys. A994, 121664 (2020), <https://doi.org/10.1016/j.nuclphysa.2019.121664>. [See article here](#).
16. Diaz-Moreno, C. A., Ding, Y., Martinez, L. M.*, Hurtado Macias, A., Singamaneni, S. R., Li, C., Lopez, J. A., Chianelli, R. R., (2020). Structural, Magnetic and Second Harmonic Generation Properties in Mayan Blue Indigo Nanostructured Pigment. *Journal of Magnetism and Magnetic Materials*, 499, 166052. <https://www.sciencedirect.com/science/article/pii/S0304885319320657#!>
17. C.A. Diaz Moreno, Y. Ding, L.M. Martinez, A. Hurtado Macias, R. Singamaneni, C. Li, J.A. López, R.R. Chianelli, "Structural, Magnetic and Second Harmonic Generation Properties in Mayan Blue Indigo Nanostructured Pigment", *J. Magnetism and Magnetic Materials*, 166052 (2019). <https://doi.org/10.1016/j.jmmm.2019.166052>. [See article here](#).
18. J.A. López and J.A. Muñoz, "Analytical expression and neural network study of the symmetry energy", Proceedings of the 15th International Conference on Nuclear Reaction Mechanisms, edited by F. Cerutti, A. Ferrari, T. Kawano, F. Salvat-Pujol, and P. Talou, CERN-Proceedings-2019-001 (CERN, Geneva, 2019), pp. 29-34. <http://dx.doi.org/10.23727/CERN-Proceedings-2019-001>. [See article here](#).
19. Md Ariful Ahsan, Vahid Jabbari, Md Tariqul Islam, Reagan S. Turley, Noemi Dominguez, Hoejin Kim, Edison Castro, Jose Angel Hernandez-Viezcas, Michael L. Curry, Jorge Lopez, Jorge L. Gardea-Torresdey, and Juan C. Noveron, "Sustainable synthesis and remarkable adsorption capacity of MOF/graphene oxide and MOF/CNT based hybrid nanocomposites for the removal of Bisphenol A from water", *Science of the Total Environment* 673, 306–317 (2019). <https://doi.org/10.1016/j.scitotenv.2019.03.219>. [See article here](#).
20. C. Dorso, Frank, G., and López, J., "Symmetry energy in neutron star matter", *Nuclear Physics A*, 984, 77-98, (2019). <https://doi.org/10.1016/j.nuclphysa.2019.01.008>. [See article here](#).
21. Ahsan, Md. A., S. K. Katla, Md. T. Islam, J. A. Hernandez-Viezcas, L. M. Martinez, C.A. Díaz-Moreno, J. Lopez, S. R. Singamaneni, J. Banuelos, J. Gardea-Torresdey, J.C. Noveron, "Adsorptive removal of methylene blue, tetracycline and Cr(VI) from water using sulfonated tea waste", *Environmental Technology & Innovation*, 11, 23 – 40, (2018). [See article here](#).
22. Md. Ariful Ahsan, Vahid Jabbari, Md. Tariqul Islam, Hoejin Kim, Jose Angel Hernandez-Viezcas, Yirong Lin, Carlos A. Díaz-Moreno, Jorge Lopez, Jorge Gardea-Torresdey, Juan C. Noveron, "Green synthesis of a highly efficient biosorbent for organic, pharmaceutical, and heavy metal pollutants removal: Engineering surface chemistry of polymeric biomass of spent coffee waste", *J. Water Process Engineering*, 25, 309-319, (2018). [See article here](#).
23. M. Castro-Colin, L. Banuelos, C. Diaz-Moreno, D. Hodges, E. Ramirez-Homs, D. Korolkov, N. Sharmin, and J. A. Lopez, "Temperature Effects in the Composition of Metal Halide Perovskite thin Films", *J. Nucl. Phy. Mat. Sci. Rad. A.*, 6, 39-49, (2018). DOI [10.15415/jnp.2018.61007](https://doi.org/10.15415/jnp.2018.61007). [See article here](#).
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132. J.A. Lopez and P.J. Siemens, "The Quark Gluon Plasma", in "Notas de Fisica", Proc. of the VII Oaxtepec Symposium on Nuclear Physics, edited by A. Dacal, Vol. 8, 1985, IFUNAM, Mexico.
133. J.A. Lopez and P.J. Siemens, "Nuclear Fragmentation", in "Notas de Fisica", Proc. of the VI Oaxtepec Symposium on Nuclear Physics, edited by M.E. Ortiz and J. Lomnitz, Vol. 7, pp. 12-13, 1984, IFUNAM, Mexico.
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135. J.A. Lopez and P. Siemens, "Nuclear Fragmentation", Nuclear Physics, A431, p. 728, 1984, cited 71 times.
136. E.A. Dean and J.A. Lopez, "Empirical Dependence of Elastic Moduli on Porosity for Ceramic Materials", Journal of The American Ceramic Society, 66, p. 366, 1983.

SELECTED ABSTRACTS OF CONFERENCE PRESENTATIONS

1. Nuclear Science Traineeships at The University of Texas at El Paso, J. Muñoz and J.A. López, APS April Meeting 2022.
2. GEANT4 dose estimations of solar protons: aluminum and Bi₂O₃-PMMA shielding, J. Mireles, M. Castro-Colin, J.A. López and L. Sajo-Bohus, APS April Meeting 2021, Abstract: E21.00010, April 17, 2021. [See abstract here.](#)
3. Isospin dependent phase diagram of nuclear matter, J.A. López, [XIII Latin American Symposium of Nuclear Physics and Applications](#), Jan. 20, 2019, San José, Costa Rica. [See abstract here.](#)
4. Phase diagrams of nuclear pasta phases in neutron star matter, J.A. Muñoz and J.A. López, APS March Meeting 2020, Abstract: J45.00013, March 3, 2020; Denver, Colorado, [See abstract here.](#)
5. Phase diagrams of nuclear pasta phases in neutron star matter, [25th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences](#), J.A. Muñoz and J.A. López, UTEP, El Paso, Texas, Nov. 2, 2019. [See abstract here.](#)
6. The pasta structure of neutron star matter, Jorge A. Lopez, International Physics Conference 2019, Glasgow, UK, Aug. 1, 2019. [See abstract here](#), [Abstract book here](#) (p. 367) and [presentation here](#).
7. "Phase Transition and Bulk Properties in Nuclear Matter" A. Gaytán Terrazas and J.A. Lopez, APS April Meeting, Denver, CO, Apr. 15, 2019. [See abstract and presentation here.](#)
8. "Isospin-dependent phase diagram of nuclear matter", J. A. Lopez. APS April Meeting, Salt Lake City, UT, Apr. 16, 2016. [See abstract and presentation here](#),
9. APS April Meeting, Baltimore, MD, Apr. 12, 2015.
10. "Isospin-dependent phase diagram of nuclear matter", P. 84, XI Latin American Symposium on Nuclear Matter and Applications, Medellin, Antioquia, Colombia, 1/Dec./2015, http://gfnun.unal.edu.co/fileadmin/content/gruposdeinvestigacion/fisicanuclear/documentos/LASNP_Aprogram.pdf.
11. Edward A. Bouchet Award Talk: Nuclear liquid-gas phase diagram - What have learned? J.A. Lopez, APS April Meeting, Baltimore, MD, Apr. 12, 2015. [See abstract and presentation here.](#)
12. Milijana Suskavcevic, J. Morales, and Jorge Lopez, "Modern Physics Simulations Revisited", published in The Bulletin of The American Physical Society, October 2005, Abstract C3.4, p.37, http://tsaps.phys.uh.edu/index_files/Program_Complete.pdf.
13. [Alán Dávila](#), Christian Escudero, Jorge Lopez and Claudio Dorso, "Geometrical aspects of isoscaling", published in The Bulletin of The American Physical Society, October 2005, abstract D3.1, p.41. http://tsaps.phys.uh.edu/index_files/Program_Complete.pdf.
14. Claudio Dorso, [Christian Escudero](#) and Jorge Lopez, "Dynamical aspects of isoscaling", published in The Bulletin of The American Physical Society, October 2005, abstract D3.2, p.41 http://tsaps.phys.uh.edu/index_files/Program_Complete.pdf.
15. [Jorge A. Lopez](#), C. Escudero and C. O. Dorso, "A Classical Mechanics Study of Isoscaling", Abstract NTD-4, p. 37, Book of Abstracts, VI Latin American Symposium on Nuclear Physics and Applications, Iguazú, Argentina, Oct. 3-7, 2005. http://www.tandar.cnea.gov.ar/eventos/SLAFNAP6.php?action=show_section§ion=BookOfAbstracts.

16. Claudio O. Dorso and Jorge A. Lopez, "Isoscaling Geometry and Correlations ", Abstract NTD-6, p. 37, Book of Abstracts, VI Latin American Symposium on Nuclear Physics and Applications, Iguazú, Argentina, Oct. 3-7, 2005.
http://www.tandar.cnea.gov.ar/eventos/SLAFNAP6.php?action=show_section§ion=BookOfAbstracts.
17. A. Davila, C. Escudero, C. O. Dorso and Jorge A. Lopez, "Geometrical aspects of isoscaling ", Abstract P-NTD-2, p. 62, Book of Abstracts, VI Latin American Symposium on Nuclear Physics and Applications, Iguazú, Argentina, Oct. 3-7, 2005,
http://www.tandar.cnea.gov.ar/eventos/SLAFNAP6.php?action=show_section§ion=BookOfAbstracts.
18. Jorge Lopez, "Evolution of isoscaling", published in The Bulletin of The American Physical Society, April 2005, Abstract R12.00005, <http://meetings.aps.org/Meeting/APR05/Event/29881>.
19. Jorge Lopez, "Mentoring minorities in physics", published in The Bulletin of The American Physical Society, Abstract H2.00001, April 2005,
<http://meetings.aps.org/Meeting/APR05/Event/29001>.
20. J.V. Martinez, J.A. Lopez, T.B.J. Jones and E. Saar, "Mean field correlations in the core of galaxy clusters", Proc. of the II Recontres de Blois "Physical Cosmology", edited by A. Blanchard, L. Celnikier, M. Lachieze-Rey and J. Tran Thanh Van. Gif-sur-Yvette, 1991, p.603, p. 603, Editions Frontieres.

PRESENTATIONS IN CONFERENCES

National and International Meetings

1. "30 years of participation of undergraduates in nuclear research at UTEP", invited talk at the Seaborg Symposium, Fall Meeting of the American Chemical Society, Atlanta, GA, 8/22-26/2021. [Link](#).
2. QUEST at UTEP, presented at "Quantum undergraduate education and scientific training workshop", Jun. 3-4, 2021, Cal State San Marcos, <https://www.csusm.edu/quest/>
3. Keynote Talk, "Ciencia en El Paso del Norte", 2021 HiGSA Conference, The Hispanic Graduate Student Association, Apr. 3, 2021, Florida State U. (Tallahassee, Florida). Via online, See video here: www.youtube.com/watch?v=V2nvVRS2ROU
4. "GEANT4 Study of Proton-Body Interactions", given at the XVI International Symposium on Radiation Physics, Jan. 15, 2021, Mexico. [See video here](#).
5. "Isospin dependent phase diagram of nuclear matter", [XIII Latin American Symposium of Nuclear Physics and Applications](#), Jan. 20, 2020, San José, Costa Rica. [See abstract here](#).
6. "El papel del tutor en la educación de físicos", [Annual Meeting of the American Association of Physics Teachers](#) – Chapter Mexico, Nov. 14, 2019, UACJ, Cd. Juárez, Chih. Mexico. See [abstract here](#).
7. "GEANT4 study of gamma ray collimation array" given at the XXIV Reunión Universitaria de Investigación en Materiales (RUIM 2019) at Universidad de Sonora, Hermosillo, Son, Mexico, Nov. 8, 2019. [More information here](#) and [abstract here](#).
8. "GEANT4 study of gamma ray collimation array" given at the XV International Symposium on Radiation Physics in conjunction to the [Congreso Nacional de Física](#), Oct. 8-10, 2019, Villahermosa, Tabasco, Mexico. [See abstract here](#).
9. "The pasta structure of neutron star matter", International Physics Conference 2019, Glasgow, UK, Aug. 1, 2019. [See abstract here](#), [Abstract book here](#) (p. 367) and [presentation here](#).

10. "Sobre la degradación de filmes fotovoltaicos de perovskita con halogenuros metálicos", RUIIM 2018: XXIII Reunión Universitaria De Investigación En Materiales, Universidad de Sonora, Hermosillo, Son. Mexico, Nov. 30, 2018. [See program here](#).
11. "Phase transitions and symmetry energy in nuclear pasta", delivered at the [15th Varenna Conference on Nuclear Reaction Mechanisms](#), Varenna, Italy. Supported by the Bouchet Award of the American Physical Society. [See program here](#). June 11-15, 2018.
12. "Temperature affects in the composition of metal halide perovskite thin films", delivered at the XIV International Symposium on Radiation Physics, BUAP, Puebla, México. 21-25 may, 2018.
13. "Materials Characterization at UTEP," invited talk at the 4° Taller de Espectrometría de Masas con Aceleradores, Instituto de Física, Instituto de Física, UNAM, Mexico City, Mexico, Aug 16, 2016.
14. "Isospin-dependent phase diagram of nuclear matter", contributed talk at the April APS meeting in Salt Lake City, Apr 16, 2016, <http://meetings.aps.org/Meeting/APR16/Session/E9.8>
15. "Summary Talk", invited Talk at the XI Latin American Symposium on Nuclear Matter and Applications, Medellín, Colombia, Dec. 4, 2015.
16. "Isospin-dependent phase diagram of nuclear matter", invited Talk at the XI Latin American Symposium on Nuclear Matter and Applications, Medellín, Antioquia, Colombia, 1/Dec./2015, http://gfnun.unal.edu.co/fileadmin/content/gruposdeinvestigacion/fisicanuclear/documentos/LASNP_Aprogram.pdf.
17. "Nuclear Liquid-gas phase transition, what have we learned?", Invited Talk at the April Meeting of the APS, Baltimore, MD, 4/11-14/2015, <http://meetings.aps.org/Meeting/APR15/Session/U3.1>, see presentation here: <https://absuploads.aps.org/presentation.cfm?pid=11456>.
18. "Analysis of electoral data", Workshop on Studies of Electoral Data, Electoral Institute of Chihuahua, Chihuahua, Chih. México, organized by the Colegio de Chihuahua, Mar. 23-27, 2015. [See pictures and more information here](#).
19. "Nuclear Physics Mentoring on the US-Mexico Border", Invited Talk at the 4th Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, Hawaii, 10/10/2014, <http://meeting.aps.org/Meeting/HAW14/Session/GA.2>
20. "Classical aspects of the Nuclear symmetry energy", Nuclear Reaction Workshop, PKU-China-US Theory Institute for Exotic Nuclei, Beijing China, Aug/10-14/2014 <http://custipen.pku.edu.cn/meetings.html>
21. "Phase diagram of neutron-rich nuclear matter", IV International Workshop on Nuclear Dynamics in Heavy-Ion Reactions, Lanzhou, China, Aug. 15-18, 2014, <http://iwnd2014.csp.escience.cn/dct/page/1>.
22. "Classical Aspects of the Nuclear symmetry energy", Japan-US Theory Institute of Exotic Nuclei – JUSEIPEN Joint Workshop, RIKEN, Tokyo, Japan, 9-12 December 2013. <http://indico2.riken.jp/indico/conferenceOtherViews.py?view=standard&confId=1263#20131209>.
23. "A study of polymers", IX International Symposium on Radiation Physics, Puebla, Apr. 15-17, 2013.
24. "Nuclear phase transformation liquid-gas", Induction Talk at The Mexican Academy of Sciences, IF-UNAM, Mexico City, Apr. 12, 2012.
25. "A surface study of plasma immersion ion implantation", VIII International Symposium on Radiation Physics, México City, Apr. 9, 2012.
26. "Educator of the Year Lecture: Physics and Art", Annual Meeting of the SHPE, Anaheim, CA, Oct. 28, 2011, <http://conference.shpe.org/shpe2011/stdprog/distinguished-lecture-undergrad>.
27. "Neutron-Rich Nuclear Physics", Annual Meeting of the SACNAS, San Jose, CA, Oct. 28, 2011, <http://sacnas.confex.com/sacnas/2011/schedule/index.cgi?password=10659sac&EmailAddress=jorgelopezgallardo%40hotmail.com&page=browse&action=schedule#view=Session1277&srch=words%7Cernst%7Cmethod%7Cand%7Cpge%7C1>.
28. "Isoscaling, not only for nuclear physics anymore", Joint Annual Conference of the NSHP and NSBP, Austin, TX, Sep. 22, 2011, <http://www.sura.org/events/NSBPNSHP2011.html>.

29. "Métodos matemáticos para análisis de elecciones", Congreso de matemáticas aplicadas a las ciencias sociales, Centro Universitario de Ciencias Sociales y Humanidades, Universidad de Guadalajara, Guadalajara, México, Mar. 12-13, 2011.
<http://www.cucsh.udg.mx/Eventos/2011/pdfs/cmate11.pdf>
30. "Recruitment and retention of Hispanics in physics: a multifaceted approach", SPIN UP Workshop, AAPT, CalPoly State University, San Luis Obispo, CA, Jun. 27, 2010.
www.aapt.org/Programs/projects/spinup/upload/SLO-Recruiting-and-Retaining-Hispanics.pdf.
31. "Origin of isoscaling: confinement and expansion", VI Symposium on Radiation Physics, Latin American Workshop on Particle Accelerators, Zacatecas, Mexico D.F., 3/7-10/2010,
www.smf.mx/~fr-smf/. See program here.
32. "Classical studies of nuclear isoscaling", 3rd Joint Meeting of APS Division of Nuclear Physics and Physical Society of Japan, Waikoloa, Hawaii, 10/14/2009.
<http://meetings.aps.org/Meeting/HAW09/Event/107850>.
33. "A study of nuclear isoscaling", V Symposium on Radiation Physics, Latin American Workshop on Particle Accelerators, and Latin American Workshop on Nuclear Track Detectors, UNAM, Mexico D.F., Mar. 8-11, 2009, <http://www.smf.mx/~fr-smf/>.
34. "Nuclear Isoscaling", II Symposium of the Division of Radiations of The Mexican Physics Society, Chihuahua, Feb 26-Mar 2, 2006.
35. "A Classical Mechanics Study of Isoscaling", VI Latin American Symposium on Nuclear Physics, Iguazú, Argentina, Oct. 3-7, 2005.
http://www.tandar.cnea.gov.ar/misc/SLAFNAP6.php?action=show_section§ion=Main.
36. Mentoring minorities in physics, 2005 APS April Meeting, Session H2: Mentoring in Physics education, 4/17/2005, Tampa, FL,
<http://meetings.aps.org/Meeting/APR05/Event/29001>.
37. Evolution of isoscaling, 2005 APS April Meeting, Session R12: Nuclear Reactions, 4/17/2005, Tampa, FL, <http://meetings.aps.org/Meeting/APR05/Event/29881>.
38. Reacciones de Iones Pesados, series of lectures presented at the IV Escuela Mexicana de Física Nuclear held at The Univ. Nacional Autónoma de México, 6/27-7/8/2005,
<http://www.teorica.fisica.unam.mx/escuela-2005/>.
39. Analytical facilities at The University of Texas at El Paso, "I International Symposium on Radiation Physics", ININ/UNAM, Mexico City, Dec. 1-3, 2003.
40. "Entropy and Size in the Nuclear Caloric Curve", invited talk, delivered at the V Latin American Symposium on Nuclear Physics, Santos, Brazil, 9/1-5, 2003,
<http://www.sbf1.if.usp.br/eventos/rtfnb/xxvi/>.
41. Alpha Particle Induced X-Ray Emission in the Classroom, contributed talk delivered at the 17th International Conference on the Application of Accelerators in research and Industry, CAARI 2002, Denton, TX, USA, Nov. 12-16, 2002.
42. "La nueva termodinámica", plenary talk delivered at the XLIV National Meeting of the Mexican Society of Physics, Morelia, Michoacan, Mexico, Oct. 2001.
43. "Development of pre-service teachers constructive pedagogical thinking", plenary talk presented by Arturo Pacheco, Mourat Tchoshanov, Sally Blake and Jorge Lopez at the International Conference on Intellectual Potential of a Society and Development of Students, Kazan, Russia, 5/16-18/2001.
44. "Teaching science using a field-based prospective", invited talk presented by Jorge Lopez at the Tatar State Institute for Professional Development of Educator (Leon Tolstoi's House) in the International Conference on Intellectual Potential of a Society and Development of Students, Kazan, Russia, May 16-18, 2001.

45. "Searching for criticality in nuclear fragmentation", XXIV Symposium on Nuclear Physics, Taxco, Mexico, Jan. 3-6, 2001.
46. "The caloric curve in collision", National Meeting of the American Physical Society, Long Beach, CA, 4/29 – 5/2, 2000.
47. "Boiling Nuclei", Meeting of the National Society of Hispanic Physicists, Portland, Oregon 10/1999.
48. "Preliminary Results of Latino", Third Latin-American Workshop on Nuclear and Heavy Ion Physics, San Andres, Colombia. Sept. 1999.
49. "Transition State Treatment of Nuclear Fragmentation", Invited Talk, Third Latin-American Workshop on Nuclear Physics, Ed. L. Sajo Bohus, San Andres, Colombia, Sept. 1999.
50. "Latino: a semi-classical model to study heavy ion reactions", XXII Symposium on Nuclear Physics, Oaxtepec, Mexico, January 4-9, 1999.
51. "Breaking Nuclei", invited talk, American Physical Society, Columbus, Ohio, during 4/18-21/1998.
52. "Fragmentation Landscapes", Meeting of American Physical Society, Columbus, Ohio 4/18/ 1998.
53. "Mapping the Nuclear Phase Diagram", Symposium on the Nuclear Equation of State in the Meeting of the Canadian-American-Mexican Physics Societies, Washington, D.C. 4/1997.
54. "Phase Diagram of Nuclear Matter", Second Latin-American Workshop on Nuclear and Heavy Ion Physics, Caracas, Venezuela. Sept. 1997.
55. "Potentials for the Hadron Gas", Second Latin-American Workshop on Nuclear and Heavy Ion Physics, Caracas, Venezuela. Sept. 1997.
56. "Busqueda de Ondas Gravitacionales", Semana de Matemáticas y Astronomía, Univ. Autónoma de Ciudad Juárez, 4/7/97.
57. "Search for Gravity Waves using the Pioneer 1993 Tracking Data", invited talk, Pioneer Users Meeting, University of Chicago, Chicago, IL, July 24-25, 1996.
58. "Transition State Treatment of Nuclear Fragmentation", invited talk, First Latin-American Workshop on Nuclear Physics, Ed. L. Sajo Bohus, Universidad Simon Bolivar, Caracas, Venezuela. 9/1995.
59. "Fragmentation Volume", XVIII Symposium on Nuclear Physics, Oaxtepec, Mexico, 1/4-7/1995.
60. "Nuclear Fragmentation", Meeting of the Assoc. of Black Physics Students, 2/94, Atlanta, GA.
61. "Hispanics in Physics", presented at the Forum on Education "Diversity at the Classroom", at the Joint Meeting of the American Physical Society and the American Association of Physics Teachers, April Meeting of APS, Crystal City VA, 4/94.
62. "Nuclear Fragmentation", Joint Meeting of the American Physical Society and the American Association of Physics Teachers, 4/1993, Wash., DC.
63. "Physics Circus", presented at the 1993 SACNAS Conference, January 1993, Albuquerque, NM.
64. "Breakup of Excited ^{16}O into Four at Intermediate Energies", contributed talk, Meeting of the Division of Nuclear Physics of the American Physical Society, October 14-16, 1992, Santa Fe, NM.
65. "Breakup of Small Projectiles", invited talk, Argentinean Workshop on Nuclear Physics, September 14-18, 1992, Buenos Aires, Argentina.
66. "Nuclear Spinodal Decomposition", XV Symposium on Nuclear Physics, 1/1992, Oaxtepec, Mexico.
67. "Cumulos Galacticos y la Materia Faltante", 4th. Annual Astronomy Week of the "Sociedad Astronomica Juarensis", May 28, 1991, Juarez, Mexico.
68. "Transition State Treatment of Nuclear Fragmentation", invited talk, XIV Symposium on Nuclear Physics, January 7-10, 1991, Cuernavaca, Mexico.
69. "Sequential Breakup of Small Nuclear Projectiles", invited talk, 6th Winter Meeting Workshop on Nuclear Dynamics, February 17-24, 1990, Jackson, Wyoming.
70. "From Fission to Multifragmentation", Nuclear Chemistry Symposium of the 197th National Meeting of The American Chemical Society April 10-14, 1989, Dallas, Texas.
71. "Fission Versus Multifragmentation", Gordon Conference on Nuclear Structure, 7/1988, Tilton, NH.

72. "A Complete (?) Model for Heavy Ion Reactions", invited talk, Meeting of the CHIC Collaboration, April 1987, Bergen, Norway.
73. "Pions and Fragmentation", Workshop on Nuclear Physics at Intermediate and High Energies, May 1986, Budapest, Hungary.
74. "Phase Transitions in Nuclear Matter", 189th Meeting of the American Chemical Society, May 1985, Miami, Florida.
75. "The Quark Gluon Plasma", VII Symposium on Nuclear Physics, January 1985, Oaxtepec, Mexico.
76. "Screening in the QCD Plasma", Gordon Conference on Nuclear Structure, August, 1984, Tilton, New Hampshire.
77. "Nuclear Fragmentation", VI Symposium on Nuclear Physics, January, 1984, Oaxtepec, Mexico.

Regional Meetings

78. "Espectroscopia, como detectan drogas y explosivos en los aeropuertos", at the "Centenario de la fundación de la Secretaría de Educación Pública", in Universidad Tecnológica de Cd. Juárez, Sep. 24, 2021.
79. "Uso de 'BOTs' en Física", at the Congreso Universitario in Universidad Tecnológica de Cd. Juárez, Sep. 4, 2015.
80. "Italian Pasta in Neutron Star Crusts", in Symposium in Low Temperature Physics, Univ. Autónoma de Ciudad Juárez, 9/27/2013.
81. "Nuclear isoscaling and fair sampling", invited talk, 2008 Joint Fall Meeting of the Texas and Four Corners Sections of APS, AAPT, and Zones 13 and 16 of SPS, NSHP and SNBP, El Paso, Oct. 17, 2008, <http://meetings.aps.org/Meeting/TS4CF08/Event/92524>.
82. "Nuclear isoscaling ", in II Jornada de Física y Matemáticas, Univ. Autónoma de Ciudad Juárez, 4/25/2008.
83. "La enseñanza de la física en pre-escolar ", talk presented at the "V Encuentro Estatal de Educación", organized by Dirección de Educación Elemental del Gobierno del Estado de Chihuahua, Ciudad Juarez, Mexico, 4/12/2003.
84. "Nuclear Reactions", talk presented at the Annual Meeting of the Zone 16 of the Society of Physics Students, University of Texas at El Paso, El Paso, Texas. Oct. 25-26, 2002.
85. Workshop "Computer Simulated Experiments for Modern Physics", Conference for the Advancement of Science teaching: CAST 2002, UTEP, Saturday, 9/11/2002.
86. Workshop "Computer Simulated Experiments for Modern Physics", Conference for the Advancement of Science teaching: CAST 2002, UTEP, Saturday, 9/11/2.
87. "Nuclear liquid-gas transformation", Plenary Talk. Meeting of the Texas Section of the American Physical Society, Rice University, Houston, Texas. Oct. 28-29, 2000.
88. "The caloric curve in collision", contributed talk, Meeting of the Texas Section of the American Physical Society, Rice University, Houston, Texas. Oct. 28-29, 2000.
89. "Computer Simulations for Modern Physics", Neat Networks '99 conference, held at the University of Texas at El Paso, El Paso, Texas, Apr. 29 to May 1, 1999.
90. "Nuclear Caloric Curve", contributed talk, Meeting of the Texas Section of the American Physical Society, in Austin, Texas. Oct. 28, 1999.
91. "Separable Potentials for the Hadronic Phase", contributed talk, Meeting of the Texas Section of the American Physical Society, in Denton, Texas. Oct. 10, 1997.
92. "Computer Simulations for Modern Physics", contributed talk, Meeting of the Texas Section of the American Physical Society, in Arlington, Texas. Oct. 11, 1996.

93. "Preferred Decays in Nuclear Fragmentation", contributed talk, Meeting of the Texas Section of the American Physical Society, in Arlington, Texas. Oct. 11, 1996.

COLLOQUIA AND SEMINARS

1. "Italian delicacies served up in a neutron star crust", University of Kansas, Dec. 6, 2021. [See announcement here](#).
2. "Física nuclear, el Chapo, Osama Bin Laden y el Papa," Universidad Autónoma de Zacatecas, Zacatecas, Zac, Mexico, Aug. 22, 2019. See [announcement here](#) and [video here](#).
3. "Física nuclear, el Chapo, Osama Bin Laden y el Papa," Universidad Autónoma de San Luis Potosí, San Luis Potosí, SLP, Mexico, Aug. 20, 2019.
4. "La física anti-drogas, anti-terrorismo y anti-fraudes religiosos", Universidad Autónoma de Ciudad Juárez – Campus CU, Mar. 19, 2019, Juárez, Mexico.
5. "La física anti-drogas, anti-terrorismo y anti-fraudes religiosos", presentation at the XIII Jornadas de Física y Matemáticas, Universidad Autónoma de Ciudad Juárez, Apr. 2, 2019, Juárez, Mexico.
6. "Physics of CSI", Universidad de Sonora, Hermosillo, Son. Mexico, Nov. 30, 2018.
7. "Symmetry energy and phase transitions in the nuclear pasta", at Texas A&M-Commerce. Sep. 27, 2018.
8. Book Presentations, "Basta de fraudes electorales: 1988 - 2018".
 - a. Feria del Libro, Museo La Rodadora, Cd. Juárez, Chih., Mexico, May 26, 2018.
 - b. Benemérita Universidad Autónoma de Puebla (BUAP), Dept. Political Sciences, Puebla, Pue, Mexico, May 23, 2018.
 - c. [Librería BUAP](#), Angelópolis, Puebla, Pue, Mexico, May 23, 2018. See newspaper reports here: [Germán Molina \(Puebla\)](#), [Intolerancia](#).
 - d. Universidad Autónoma del Estado de Hidalgo, Pachuca, Hidalgo, Mexico, May 21, 2018. See newspaper report here: [EA Noticias](#).
 - e. [MORENA Del. Polanco](#), Mexico City, Mexico, May 21, 2018.
 - f. Universidad Autónoma Metropolitana, May 18, 2018. See [videos 1](#), [2](#), [3](#), [4](#) and [5](#).
 - g. [Universidad Nacional Autónoma de México, Facultad de Filosofía y Letras](#), Mexico City, Mexico, May 18, 2018. See newspaper reports here: [Sin Embargo \(Mar. 19\)](#), [Milenio \(May 20\)](#), [EA Noticias \(May 21\)](#), [La Jornada \(May 2\)](#).
 - h. Universidad Autónoma de Ciudad Juárez, Facultad de Economía, Ciudad Juárez, Chih., Mexico, May 14, 2018.
 - i. Journalist Group "María Cristina", video conference, Hotel Maria Cristina, Mexico City, Mexico, Apr. 14, 2018.
9. "Italian delicacies served up in a neutron star crust", Notre Dame University, Sep. 20, 2017. [See announcement here](#).
10. "Spectroscopia", at the Universidad Tecnológica de Cd. Juárez, 20/Jan./2017.
11. Workshop on electoral data, MORENA Juárez Headquarters, May 14, 2016
12. Book Presentation, "Estudios científicos de fraudes electorales", Universidad Pedagógica Nacional, Cd. Juárez, April 26, 2016
13. Book Presentation, "Estudios científicos de fraudes electorales", Instituto de Ciencias Sociales y Administrativas, Universidad Autónoma de Ciudad Juárez, Cd. Juárez, April 14, 2016
14. "Física del CSI," Benemérita Universidad Autónoma de Puebla, Benemérita Universidad Autónoma de Puebla, Puebla, Mexico, April 7, 2016.
15. "Física del CSI," Universidad de Sonora, Hermosillo, Son, Mexico, March 8, 2016.

16. "Física en UTEP," Universidad de Sonora, Hermosillo, Son, Mexico, March 7, 2016.
17. Book Presentation, "Estudios científicos de fraudes electorales", [CUSCH](#), Universidad de Guadalajara, Feb. 19, 2016
18. "Física en UTEP," Universidad de Guadalajara, Guadalajara, Jal, Mexico, Feb. 19, 2016.
19. "Física del Chapo, Osama Bin Laden y el Papa," Universidad de Colima, Colima, Col, Mexico, Feb. 16, 2016.
20. Neutron-Rich Nuclear Matter, Nuclear Theory Group, Lawrence Berkeley National Lab, 7/16/2014
21. "Phase changes in nuclear matter", Oklahoma State U., Stillwater, OK, Apr. 18, 2014.
22. "Neutron-rich nuclear physics", Oklahoma State U., Stillwater, OK, Apr. 17, 2014.
23. "Nuclear matter cooked Italian style", Institute of Nuclear Sciences, Universidad Nacional Autónoma de México, Mexico City, Mexico, May. 24, 2013.
http://www.nucleares.unam.mx/icn2/index.php?option=com_content&view=article&id=549
24. "From nuclei to nuclear pasta ... in stars!", Bradley U., Mar. 23, 2012.
25. "The new nuclear physics: nuclei with excess neutrons", Univ. California Riverside, 5/12/2011.
26. "Quantum Mechanics and consciousness", Philosophic Systems Institute, El Paso, TX, 4/22/2011,
27. "Recruitment and retention of Hispanics in physics", California State Univ., Fresno, Mar. 18, 2011.
28. "Métodos matemáticos para datos electorales", Centro Universitario de Ciencias Exactas e Ingenierías, Universidad de Guadalajara, Guadalajara, México, Mar. 13, 2011.
29. "Métodos matemáticos para datos electorales", Centro Universitario de Ciencias Económico Administrativas, Universidad de Guadalajara, Guadalajara, México, Mar. 12, 2011.
30. "Physics and art", California State University San Marcos, San Marcos, CA, 9/30/2010.
31. "Origin of Nuclear isoscaling", Univ. Autónoma de Colima, Colima, Colima, México, May 7, 2010.
32. "The new nuclear physics", Univ. North Carolina Wilmington, 4/9/2010.
33. "Physics and art", Univ. North Carolina Wilmington, 4/9/2010.
34. "Fraude Electoral", Universidad Autónoma de Zacatecas, Zacatecas, México, Mar 7, 2010.
35. "2006, Electoral Fraud?", University of Texas at Brownsville, Brownsville, TX, Feb. 19, 2010.
36. "The new nuclear physics and isoscaling", Univ. Texas at Brownsville, Brownsville, TX, 2/19/2010.
37. Lopez, J. A., Book Presentation in Chile, "Scientific studies of electoral data," Facultas de Ciencias Jurídicas y Sociales, Universidad de Concepción, Concepción, Chile. (December 17, 2009).
38. "2006, Electoral Fraud?", University of Texas at El Paso, El Paso, TX, Oct. 29, 2009.
39. Lopez, J. A., Book Presentation in Aguascalientes, México, "Scientific studies of electoral data", Facultad de Ciencias Políticas, Universidad Autónoma de Aguascalientes, Aguascalientes. México. (August 20, 2009).
40. Lopez, J. A., Colloquium at Valparaiso, Chile, "The use of Peer Leaders in science teaching", Universidad de Playa Ancha, Valparaiso, Chile. (August 20, 2009).
41. Lopez, J. A., Book Presentation in Cd. Juárez, México, "Scientific studies of electoral data", Facultad de Ciencias Políticas, Univ. Autónoma de Cd. Juárez, Cd. Juárez, México. (6/17/ 2009).
42. Lopez, J. A., Colloquium at Texas Tech, "Physics and Art," Texas Tech, Lubbock, Texas. (5/2009).
43. "Física Electoral", delivered at the "Semana de Ingeniería", Universidad Autónoma de Ciudad Juárez, 9/25/2008.
44. "Nuclear isoscaling", Universidad Autónoma de Colima, Colima, Colima, México, May 7, 2008.
45. "Origin of isoscaling ", Michigan State University, Jan. 30, 2008.
46. " Origin of isoscaling ", Argonne National Lab., Argonne, Illinois, Jan. 28, 2008.
47. "Physics at UTEP", Bradley University, Peoria, Il, Nov. 17, 2007.
48. "Physics and Art", Bradley University, Peoria, Il, Nov. 16, 2007.
49. "Physics and Art", Southern Illinois University, Nov. 14, 2007.
50. "Physics at UTEP", Universidad Autónoma de Sinaloa, Culiacán, Sinaloa, Mexico, May 29, 2007.

51. "Física Nuclear", Universidad Autónoma de Ciudad Juárez, 9/19/2006.
52. "Nuclear Isoscaling", Universidad Autónoma de Colima, Colima, México, 5/3/2006.
53. "Physics at UTEP", Universidad Autónoma de Baja California, Ensenada, Mexico, 21/Nov/2005.
54. "Los Errores de Einstein", Universidad Autónoma de Colima, Colima, Mexico, 3/May/2005.
55. "Physics at UTEP", Universidad Autónoma de Sonora, Hermosillo, Sonora, Mexico, 23/Nov/2004.
56. "A classical MS model of heavy ion reactions ", Arkansas State Univ., Jonesboro, AR, 10/7/ 2004.
57. "UTEP's Radio telescope ", Universidad Autónoma de Colima, Colima, Mexico, 4/15/2004.
58. "A model for nuclear matter ", Universidad Autónoma de Colima, Colima, Mexico, 7/10/2003.
59. "Termodinámica de Microsistemas", Univ. Autónoma. Cd. Juárez, 9/17/2002.
60. "Critical exponents of nuclear fragmentation", Instituto de Física, Universidad Nacional Autónoma. Mexico, Mexico, 6/30/2002.
61. "Critical exponents of nuclear fragmentation", Inst. Nacional de Investigaciones Nucleares, Mexico 7/2/2002.
62. "Criticality in nuclear fragmentation", Univ. de La República, Montevideo, Uruguay, 3/8/ 2001.
63. "Nuclear liquid-gas transformation", Western Kentucky University, Nov. 21, 2000.
64. "Search of gravity waves", Physics Dept., St. Edwards University, Austin, Texas, 10/5/2000.
65. "Aztec astronomy", School of Natural Sciences., St. Edwards University, Austin, Texas, 10/5/2000.
66. "Background radiation", Univ. Autónoma de Ciudad Juárez, 9/21/2000.
67. "Criticality in nuclear fragmentation", Instituto Nacional de Investigaciones Nucleares, Salazar, Mexico, 8/24/2000.
68. " Criticality in nuclear fragmentation", Instituto de Física, Univ. Nacional Autónoma de Mexico, Mexico, 8/23/2000.
69. "Physics Education", Physics Dept., Southern Illinois University, Carbondale, Illinois, 10/1/1999.
70. "Ultrasound diagnostics for airplane fuselages", Univ. Aut. de Cd. Juarez, Cd. Juarez, Mexico, 9/24/1999.
71. "Computer simulations", to be delivered at Univ. Aut. Metropolitana, Mexico, 11/23/1999.
72. "Search of Gravity Waves", Physics Dept., University of Texas at Brownsville, Brownsville, Texas, 4/8/99.
73. "Caloric Curve in Nuclear Fragmentation", Universidad de Buenos Aires, Buenos Aires, Argentina, July, 1999.
74. "Gravity Waves", Physics Dept., Texas Tech University, Lubbock, Texas, Nov. 1998.
75. "Simulaciones de Física Moderna", Inst. Tecnológico de Durango, 5/14/1998, Durango, Mexico.
76. "Nuclear Fragmentation", Texas Christian University, Forth Worth, Texas, 4/16/97.
77. "Probability Landscapes in Nuclear Fragmentation", Tandem Accelerator, Buenos Aires, Argentina, 6/18/ 1997.
78. "Phase Changes in Nuclear Fragmentation", Universidad Nacional, Bogota, Colombia, 9/12/1997.
79. "Phase Diagram of Nuclear Matter", University of Maryland, College Park, Maryland, 3/10/1996.
80. "Math Phys", Club Zero, Math. Department, Univ. Texas at El Paso, April 5, 1996.
81. "Computer simulations", Univ. Autónoma Metropolitana, Mexico City, Mexico, 11/23/1999.
82. "Exploding stars", Physics Department, Moorehead State Univ., Moorehead MN, 5/ 27-29/1995.
83. Mapping the nuclear phase diagram", Hampton University, Hampton, Virginia, 12/12/1995.
84. "Nuclear fragmentation", Physics Dept., Sam Houston State University, 10/94, Huntsville, TX.
85. "Pre-transition particle emission in nuclear fragmentation", National Superconducting Cyclotron Lab., Michigan State University, East Lansing, Michigan, 6/1994.
86. "TST treatment of nuclear fragmentation", Vanderbilt University, 2/94, Nashville, Tennessee.
87. "TST treatment of nuclear fragmentation", Tennessee Tech., 2/94, Cookeville, Tennessee.
88. "Nuclear fragmentation", Sam Houston State University, Huntsville, Texas, October, 1994.

89. "Self-similar expansion of nuclei", Nuclear Theory Group, Lawrence Berkeley Lab, 7/1993.
90. "Nuclear fragmentation", Universidad Autonoma de Nuevo Leon, 5/1993, Monterrey, Mexico.
91. "Breakup of small nuclear projectiles", New Mexico State Univ., 4/1993, Las Cruces, NM.
92. "Breakup of small nuclei", Universidad Autonoma de Mexico, May 26, 1992, Mexico City.
93. "Hot zone formation in heavy ion collisions", Cyclotron Inst., Texas A&M Univ., 11/1991, College Station, TX.
94. "Transition state treatment of nuclear fragmentation", New Mexico State Univ., Feb. 14, 1991, Las Cruces, NM.
95. "Nuclear fragmentation", Physics Department, University of Texas at El Paso, March, 1990, El Paso, Texas.
96. "Nuclear multifragmentation", California State University - Hayward, 2/1989, Hayward, CA.
97. "Nuclear multifragmentation", California Polytechnic State Univ., 2/1989, San Luis Obispo, CA.
98. "Nuclear multifragmentation", California State University - San Jose, 3/1989, San Jose, CA.
99. "Recent developments in nuclear multifragmentation", Texas A&M University, April 1989, College Station, Texas.
100. "Nuclear Molecular Calculation for Disassembly of Nuclear Matter", Zentralinstitut fur Kernforschung, October, 1986, Rossendorf, Former East Germany.
101. "Quark Gluon Plasma in Linear Response Theory", Technische Universitat Munchen, May 1986, Munich, Germany.
102. "Relativistic Heavy Ion Collisions", Universita degli Studi di Milano, November 1985, Milano, Italy.
103. "The Quark Gluon Plasma", Physics Department, University of Texas at El Paso, February 1985, El Paso, Texas.

ORGANIZATION OF MEETINGS

Meetings organized

1. Workshop on Studies of Electoral Data, at the [Electoral Institute of Chihuahua](#) in Chihuahua, Chih. México, organized by the Instituto Estatal Electoral de Chihuahua and the [Colegio de Chihuahua](#), Mar. 23-27, 2015. See [pictures and more information here](#).
2. XI International Symposium on Radiation Physics. Organized by the Sociedad Mexicana de Física – Division of Radiation Physics, Universidad Autónoma de Ciudad Juárez in Cd. Juárez, Chihuahua, Mexico, March 4 – 7, 2015.
<http://wiki.utep.edu/display/~jorgelopez/XI+International+Symposium+on+Radiation+Physics>.
3. The IV Latin-American Symposium on Nuclear Physics, with Efraín Chávez and Marcos Moshinsky, held at El Colegio Nacional, Mexico City, Sept. 24-28, 2001. 112 attendants from 20 countries. Funded by NSF, Trieste (Italy), Conacyt (Mexico), Soc. Mex. Fis. (Mexico).
4. "From K-16 Partnership to the Classroom: Workshop on Planning and Implementing Field-Base Courses in Math and Science", with Arturo Pacheco, Tom Brady, Sally Blake, Mourat Tchoshanov, Art Duval, Steve Sanchez, Connie Kubo Della-Piana, Erandi Perez, UTEP, El Paso, Aug. 2001.
5. Meeting of the National Society of Hispanic Physicists, Portland, Oregon, October 7-10, 1999.
6. Member of Organizing Committee of the Texas Leadership Institute (TexLI) for K-8 Science Education, a program of the Teacher-Scientist Alliance Institute of the American Physical Society, Austin, Texas, 4/ 30 to 5/5, 1999.

7. Joint Meeting of the Texas Sections of the American Physical Society, The American Association of Physics Teachers, and The Society of Physics Students. Held at UTEP from Oct. 15-17, 1998. Attendance 204 plus many unregistered local high school teachers.
8. I Semana de Ciencia Y Tecnología, by Sociedad Mexicana para el Progreso de la Ciencia y la Tecnología,, at the Universidad Autónoma de Ciudad Juárez, Apr. 20-24, 1998, Juárez, México.
9. Corporate Scholars Workshop, Committee on Minorities of the American Physical Society, 10/1-3/1993, Hampton, VA.

Chairmanship

1. Chair, Thursday Session, [XIII Latin American Symposium of Nuclear Physics and Applications](#), Jan. 20-24, 2020, San José, Costa Rica.
2. Chair, Session on computational methods, XV International Symposium on Radiation Physics in conjunction to the [Congreso Nacional de Física](#), Oct. 8-10, 2019, Villahermosa, Tabasco, Mexico.
3. Chair, Session, 2016 Joint Fall Meeting of the Texas and Four Corners Sections of APS, AAPT, and Zones 13 and 16 of SPS, held at The New Mexico State University, Oct. 21, 2016.
4. Chair, Session 1.2 Monday parallel session 1: Applications: Medical I, Nov. 30, 2015, and Session 1.2 Thursday parallel session 1: Hadron structure and interactions II, Dec. 3, 2015, XI Latin American Symposium, Medellin, Colombia, <http://qfnun.unal.edu.co/fileadmin/content/gruposdeinvestigacion/fisicanuclear/documentos/LASNPaprogram.pdf>.
5. Chair, Morning Session, XI International Symposium on Radiation Physics, Cd. Juárez, Chih., Mexico, 4/3/2015, <http://wiki.utep.edu/display/~jorgelopez/XI+International+Symposium+on+Radiation+Physics>.
6. Chair, Afternoon Session, IV International Workshop on Nuclear Dynamics in Heavy-Ion Reactions, Lanzhou, China, 8/17/2014, <http://iwnd2014.csp.escience.cn/dct/page/65580>.
7. Chair, Morning Session, X International Symposium on Radiation Physics, Tuxtla Gutierrez, Chiapas, Mexico, 4/3/2014, http://mctp.mx/e_x_radiation_physics.html.
8. Round Table Panelist, 2011 NSHP National Conference, Austin, TX, Sep. 21, 2011
9. Chair, Nuclear Physics Session, 2011 Joint NSHP-NSBP meeting, Austin TX, Sep. 21-24, 2011.
10. Chair, Session [H5 High Energy Physics: Experimental](#), 2008 Joint Fall Meeting of the Texas and Four Corners Sections of APS, AAPT, and Zones 13 and 16 of SPS, and the Societies of Hispanic & Black Physicists, held at The University of Texas at El Paso, Oct. 18, 2008.
11. Chair, Session "Nuclear Thermodynamics and Dynamics", VI Latin American Symposium on Nuclear Physics, Iguazú, Argentina, 10/6/2005. http://www.tandar.cnea.gov.ar/misc/SLAFNAP6.php?action=show_section§ion=Main.
12. Chair, Friday Morning session, V Latin American Symposium on Nuclear Physics, Santos, Brazil, Sept. 5, 2003, <http://www.sbf1.if.usp.br/eventos/rtnb/xxvii/>.
13. Chair, session A3, meeting of the Texas Section of the American Physical Society, held at University of Texas at Brownsville, Brownsville, Texas, Oct. 10-12, 2002.
14. Chair, High Energy Physics Session, meeting of the Texas Section of the American Physical Society, held at Stephen F. Austin State University, Nacogdoches, Texas, Mar. 7-9, 2002.
15. Chair, plenary session, meeting of the Texas Section of the American Physical Society, held at Texas Christian University, Forth Worth, Texas, Oct., 2001.
16. Chair of Session 3, XXIV Symposium on Nuclear Physics", Taxco, Mexico, Jan. 3-6, 2001.
17. Chair, nuclear physics II session, XLIV Annual Meeting of the Mexican Soc. Physics, Morelia, Mexico, 10/ 2000.
18. Chair, "Session 2: Nuclear Structure", Third Latin-American Workshop on Nuclear and Heavy Ion Physics, Universidad Nacional de Colombia, San Andrés, Colombia, Sept. 13, 1999.

19. Chair, "IV LWNHIP and Beyond", Third Latin-American Workshop on Nuclear and Heavy Ion Physics, Universidad Nacional de Colombia, San Andrés, Colombia, Sept. 17, 1999.
20. Chair, session "Physics in Mexico", Meeting of the Texas Section of the American Physical Society, to be held at UTEP, October 15-17, 1998.
21. Chair, Session CC on High Energy/Particle Physics II, Meeting of the Texas Section of the American Physical Society, Denton, Texas, Oct. 10, 1997.
22. Chair, Invited Symposium on Nuclear Physics, Joint Meeting of the Canadian-American and Mexican Physics Societies, Washington, D.C., in April, 18-21, 1997.
23. Chair, Invited Symposium on "Physics of Reduced Dimensionality", Meeting of The American Physical Society, San Jose, CA, Mar. 21, 1995.
24. Chair of Symposium, Meeting of the American Physical Society, Crystal City, VA, 4/94.
25. Chair, Invited Symposium "Researchers at the Leading Edge", Meeting of the American Physical Society, Crystal City, VA, 4/94.
26. Chair of Symposium, Meeting of the American Physical Society, Pittsburgh, PA, 3/94.

Advisory Boards

1. Member, International Advisory Committee, Symposium on Nuclear Physics, Cocoyoc, Mexico, 1995 and from 2001 to date. <http://www.nucleares.unam.mx/~snpl/>
2. Member, External Advisory Board, Center for Gravitational Wave Astronomy, University of Texas at Brownsville, 2011 to date.
3. Member, International Advisory Committee, Symposium on Radiation Physics, 2003 to date, www.smf.mx/~fr-smf/
4. Member, International Advisory Committee, Latin-American Symposium on Nuclear Physics and Applications, 1997(Venezuela), 1999 (Venezuela), 2003 (Colombia), 2005 (Mexico), 2009 (Chile), 2013 (Uruguay), 2015 (Colombia), 2017 (Cuba), 2020 (Costa Rica).
<http://www.fing.edu.uy/if/lasnpa/index.php?page=committees>, <http://gfnun.unal.edu.co/xi-lasnpa/>,
<http://cicanum.ucr.ac.cr/es/home.html>.
5. Member, International Advisory Committee, Pan-American Advanced Study Institute on Rare Nuclear Isotopes, held in Joao Pessoa, Brazil, October 2010. <http://meetings.nscl.msu.edu/pasi2010/>
6. Member, Advisory Board, San Diego Science Festival, San Diego, 2009.
7. Member, Advisory Board of book "Early Childhood Education and Socialization: Developmental Applications and Methodologies", Eds. S. Blake and S. Taylor, IGI Global Publishing, 2009.
8. Member, Advisory Board, Scientific Partnership for International Research on Inquiry Thinking 8/2010, <http://inquirythinking.googlepages.com/>.
9. Member, Cuerpo Consultivo Internacional, Revista de Orientación Educacional, Universidad de Playa Ancha, Valparaíso, Chile, from 2008 to date, <http://www.roe.cl/index.php/roe/about/editorialTeam>.
10. Member, International Advisory Committee, Varena Conference on Nuclear Reaction Mechanisms, 6/ 9-13/2003.
11. Member of The International Scientific Advisory Committee, Pan-American Advanced Studies Institute on Computational Materials Science, Pontificia Universidad Católica de Chile, Santiago, Chile, 1/8-19/2001 www.iitap.iastate.edu/iitap/pasi.html.
12. Member, Board of Advisors, Project ASTRO "*El universo en sus manos*", Astronomical Soc. Pacific, 4/2001 – 4/2002

13. Member, Organizing Committee of the Texas Leadership Institute (TexLI) for K-8 Science Education, a program of the Teacher-Scientist Alliance Institute of the American Physical Society, Austin, Texas, Apr. 30 to May 5, 1999.
14. Member, Texas Leadership Institute (TexLI) for K-8 Science Education, 1998 (Austin), 1999.
15. Member, Educational Task Force, NASA's Office of Space Science, 1995 (Washington, D.C.), 1996 (Annapolis, VA), 1996 (Las Cruces).

DEVELOPMENT OF RESEARCH FACILITIES

1. Acquisition of an ORION 5 sputtering thin film, 2017.
2. Acquisition of PHI 5600 XPS/AES/UV, 2016.
3. Acquisition of a MARCUS 10 underground radon gas detector from Gammadata, 2016.
4. Acquisition of portable X Ray Fluorescence gun, 2008.
5. Acquisition of 150 MeV electron accelerator, 2007, with Miguel Castro-Colin.
6. Reconstruction of the Physics Computer Laboratory, acquisition of twelve new computers, with R. Ravelo, Spring 2006
7. Reconstruction of the Advanced Laboratory, with M. Castro Colin, Fall 2005 – 2010
8. Radio Astronomy. Construction of a radio telescope for PHYS 3243, with Luis Basurto, 2005.
9. Reconstruction of a Laboratory For Surface Studies, with W. Durrer, 2002-2003, funded with \$119,000 from DOD grant.
10. PIXE with Alpha from Americium, development of experimental setup with UG students Mario Borunda and Manuel Antonio Ramos, Fall 2001 and Fall 2003.
11. X-ray detector, a multichannel analyzer and power supply, 1997.
12. Computational Physics. Equipment used in research in computational physics acquired with funding from many sources and donations. Equipment includes:
 - IBM workstation RS/600 model 370, with funding from UTEP's College of Science. 1995.
 - IBM Donation composed of an IBM workstation RS/600 model 320 and four X-terminals, 1995.
 - Four X-Terminals, added to IBM RS/6000 system, from the Jet Propulsion Laboratory, 1994.
 - Power Macintosh 7600/132, obtained with funding from UTEP's MIE. Fall 1996.
 - Six Sun workstations (model LC II), NASA Network Resource and Training Sites grant, 1996.
 - IBM F50 workstation, (cost over \$24,000), NSF funding, 5/1997.
 - Sparc Sun workstations (model Ultra 5), with funding from the NASA Network Resource and Training grant, 1997.
 - 3 IBM P43 workstations, transferred from UTEP UGLC's UNIX lab to physics, 9/99.

RECENT RESEARCH MEETINGS ATTENDED (NOT AS SPEAKER)

- Advancing Research and Technologies in the Sciences (ARTS) Forum, Department of Energy, Washington DC, 2/10/2020.

- May 20-24, 2019, [Workshop Machine Learning Applied to Nuclear Physics](#) at the [Facility for Rare Isotope Beams](#) on the [Michigan State University](#) campus in [East Lansing, MI](#).
- Training on Orion 5 sputtering system, AJA International, Scituate, MA, 3/12-15/2017.
- 28-31 Jan. 2017, [April Meeting of the American Physical Society](#), in Washington, DC as a Member of the Forum on Education.
- 25-27 Jan. 2017, Convocation of the American Physical Society, in Washington, DC as Leadership Convocation Participant representing the Texas Section of APS
- Training on PHI 5600 XPS/AES/UPS spectroscopy instrument, RBD Instruments, UTEP, 12/15-1/5/2017.
- 20-23 Oct. 2016, [2016 Joint Meeting 4CS + TSAPS Meeting](#), and Executive Board Meeting of TSAPS, Las Cruces, NM.
- 24 Aug. 2016, Teaching Forum, [Academy of Distinguished Teachers](#), Austin, Texas.
- April 16-18: FED Executive Committee meeting, APS April Meeting, Salt Lake City. See [abstract and presentation here](#), and see details of the [session chaired here](#).
- 6-8 Apr. 2016, XII International Symposium on Radiation Physics, Puebla, Pue. Mexico, <http://wiki.utep.edu/display/~jorgelopez/XII+International+Symposium+on+Radiation+Physics>.
- 4-6 Mar., 2015, XI International Symposium on Radiation Physics, Cd. Juarez, Chih. Mexico, <http://wiki.utep.edu/display/~jorgelopez/XI+International+Symposium+on+Radiation+Physics>.
- 21 – 25 July 2014, Nuclear Structure 2014, University of British Columbia, Vancouver, Canada, <http://ns2014.triumf.ca/>
- 9 – 12 June 2014, Collective Dynamics in High Energy Collisions, Lawrence Berkeley National Lab in Berkeley, CA, <http://tbs2014.lbl.gov/>
- 2–5 Apr. 2014, X International Symposium on Radiation Physics, Tuxtla Gutierrez, Chiapas, Mexico, http://mctp.mx/e_x_radiation_physics.html.
- April 22-23, 1999, "Formación de Especialistas en Políticas Regionales de Ciencia y Tecnología", sponsored by the Mexico-USA Foundation, Puebla Mexico.
- Nov. 5-7, 1993, "Recruitment and Retention of Minorities in Physics", organized by the American Association of Physics Teachers, Chevy Chase, MD.
- Jan. 22-25, 1991, "Third Annual Minority Initiative Technical Interchange Workshop", Jet Propulsion Laboratory, Pasadena, California.
- Nov. 1987, Ettore Majorana School on Nuclear Physics, Erice, Italy.
- Sep. 26-30, 1983, Third International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions, Brookhaven National Laboratory, Brookhaven, New York.
- July 25 to Aug. 6, 1983, Phase Transitions in Gauge Theories and Their Practical Applications, University of Washington, Seattle, Washington.
- Aug. 15 to 19, 1983, Nuclear Structure Gordon Conference, Tilton, New Hampshire.
- Aug. 22 to Sep. 3, 1982, NATO Pacific Summer Institute, Vancouver Island, Canada.
- Aug. 17-28, 1981, Nuclear Theory Summer Workshop, Univ. of California, Santa Barbara, CA.
- June 28 to July 2, 1982, Nuclear Structure Gordon Conference, New London, New Hampshire.

GUESTS INVITED

- 12-15 Nov. 2019, Randall Knight, CalPoly State U. Randy gave a seminar on 13 Nov. 2019.
- 8 Jun. – 21 Jun. 2019, [Claudio Dorso](#), Universidad de Buenos Aires. On June 18 Claudio gave the Physics Seminar "Diffusion of fear in crowds".

- 25 Jun. – 14 Jul. 2018, [Claudio Dorso](#), Universidad de Buenos Aires. On July 13 Claudio gave the Physics Seminar "[Measles Outbreaks. Is the World Health Organization wrong?](#)"
- 3 - 8 Apr. 2018, Alfredo Aranda, Universidad de Colima, Research guest and seminar speaker: "A hidden interaction with flipped generations", 5/Apr/2018.
- 30 Mar. 2018, Jesus Pando, DePaul University, Chicago, Il, seminar speaker: "[Wavelets and the large scale structure of the universe](#)", and a second talk in my ASTR 1308 "Multimessenger astronomy."
- 8-10 Nov. 2017, [Carlos Bertulani](#), Texas A&M Commerce University. On Nov. 8 Carlos gave the lecture "The Lithium problem" in ASTR 1308, and on Nov 9 he gave the Physics seminar "[Chemical Evolution in the Universe](#)". Listen to the UTEP Science Studio interview [here](#).
- 6-9 Sep. 2017, [Jason Holmes](#), Arizona State University. On Sep. 8 Jason gave the Physics Seminar "Next Generation detectors for proton therapy quality assurance".
- 23- Jun. – 8 Jul. 2017, [Claudio Dorso](#), Universidad de Buenos Aires. On July 7 Claudio gave the Physics Seminar "[Italian Delicacies Served Up in a Neutron Star Crust](#)".
- 28 Oct. 2016, David Raymond, New Mexico Tech, seminar.
- 31 Mar. – 9 Apr. 2016, Laszlo Sajo-Bohus, Universidad Simón Bolívar (Venezuela), Research guest and seminar speaker.
- 1- 12 Mar. 2016, Jesus Escamilla, Universidad Autónoma del Estado de Hidalgo, Research guest and seminar speaker: "[Reactor Neutrino Oscillations: Current Status](#)"
- 17 - 21 Apr. 2014, Alfredo Aranda, Universidad de Colima, Research guest and seminar speaker.
- 28 Sep. 2012, Javier Miranda, UNAM, seminar speaker.
- 3 Oct. – Nov. 12, 2011, [Claudio Dorso](#), Universidad de Buenos Aires, Research guest and seminar speaker.
- 28 Jan. 2011, Scott Pratt, Michigan State University, seminar "Measuring sizes to 10^{-15} meters and times to 10^{-23} seconds".
- 1-3 Dec. 2010, [Carlos Bertulani](#), Texas A&M Commerce University, seminar "Challenges in nuclear astrophysics".
- 3 Feb. 2010, [David Raymond](#), New Mexico Tech, seminar "A Radically Modern Approach to Introductory Physics".
- 11 Apr. 2008, Alejandro de Lozanne, University of Texas, Austin, Texas, seminar "Magnetoresistance in Your Computer, the Nobel Prize, and in Future Sensors".
- 12-16 Mar. 2008, Alfredo Aranda, University of Colima, seminar "Hyperspace Higgs and the LHC".
- 16 Nov. 2007, Dr. Gabriela Gonzalez, LIGO Scientific Collaboration, seminar "APS 2007 Bouchet Award Seminar: Searching for Gravitational Waves".
- 12-14 Nov 2007, Luis Felipe Rodriguez, Center for Radioastronomy and Astrophysics Universidad Nacional Autónoma de México, seminar "American Astronomical Society's Shapley Lectureship Program: Faster Than Light?"
- 5-8 Nov. 2007, Ben Zeidman, Argonne National Lab, seminar "Argonne National Lab".
- 10-14, Apr. 2017, [Alfredo Aranda](#), Universidad de Colima. On Apr. 13 Fefo gave the lecture "Higgs, quarks, neutrinos and all that stuff that makes up the universe" in ASTR 1308.
- Oct. 3-30, 2011: [Claudio Dorso](#), [Universidad de Buenos Aires](#).
- 10-15 Oct. 2007, Christina Allen, Instituto de Astronomía, Universidad nacional Autónoma de México, seminar "Galactic orbits of globular clusters: Surprises from the bar".

- 1 Sep. 15 Dec. 2007, Alfredo Aranda, Universidad de Colima, seminar on 17 Sep 2007 "Neutrino and Higgs Physics at the Electroweak Scale".
- 30 Mar. 2007, Javier Miranda, Instituto de Física, Universidad Nacional Autónoma de México, seminar "The ABC of PIXE using heavy ions".
- 8-10 Feb. 2007, Arthur S. Edison, Department of Biochemistry & Molecular Biology, University of Florida, seminar "Ultra High-Sensitivity NMR and Applications in Natural Products".
- 25-27 Jan. 2007, Luz J. Martínez-Miranda, University of Maryland, seminar "Response of an Organic Molecule to a Nanometer Particle".
- Dec. 1-8 2006, [Alfredo Aranda](#), University of Colima, seminar "Higgs from Extra Dimensions".
- 28-30 Nov. 2006, Ben Zeidman, Argonne National Lab, seminar "Toying with quarks".
- 18-21 Oct. 2006, Ricardo Alarcon, Arizona State University, seminar "Physics with cold and ultracold neutrons".
- 5-8 Oct, 2006, Victor Romero Rochin, UNAM, seminar "Thermodynamics of ultracold trapped atoms".
- 28-30 Sep. 2006, José Wudka, UC-Riverside, seminar "Physics in higher dimensional universes".
- 20-23 Sep. 2006, Wolf Luis Mochan Backal, Centro de Ciencias Fisicas, UNAM, seminar "Casimir effect for arbitrary materials: contributions within and beyond the light cone".
- Feb. 24-26, 2006, Efraín Chávez, Universidad Nacional Autónoma De México, D.F., Mexico.
- Feb. 24-26, 2006, Guillermo Espinosa, Universidad Nacional Autónoma De México, D.F., Mexico.
- Jan. 25, 2006, Matthew Baring, Rice University, Houston, TX.
- Jan. 13-14, 2006, Keith Stowe, Cal Poly State University, San Luis Obispo, CA.
- Dec. 18-23, 2005, Armando Barrañón, Univ. Autónoma Metropolitana-Azcapotzalco, Mexico D.F.
- Dec. 9, 2005, Francisco Solis, Arizona State University.
- Nov. 16, 2005, Benjamin Zeidman, Argonne National Lab., Argonne, Illinois.
- Oct 19, 2005, Michael Martin Nieto, Los Alamos National Lab., Los Alamos, NM.
- Sep. 21, 2005, Mario Diaz, University of Texas at Brownsville, Brownsville, Texas.
- Jul. 1-30, 2005, [Alfredo Aranda](#), Universidad De Colima, Colima, Mexico.
- Apr. 20, 2005, Damond Benningham, McDonald Observatory, Austin, Texas.
- Feb. 23, 2005, Claudio Dorso, Universidad De Buenos Aires.
- Jan. 13, 2005, Michael Thoennesen, Michigan State University.
- Aug. 1 - 15, 2004, Claudio Dorso, Universidad De Buenos Aires.
- Dec. 13-24, 2004, Paolo Amore, Universidad De Colima, Colima, Mexico.
- Jun. 1-25, 2004, [Alfredo Aranda](#), Universidad De Colima, Colima, Mexico.
- Oct. 16-26, 2004, Claudio Dorso, Universidad De Buenos Aires.
- Dec. 18, 2003, [Alfredo Aranda](#), Universidad De Colima, Colima, Mexico.
- Dec. 18, 2003, Paolo Amore, Universidad De Colima, Colima, Mexico.
- Ago. 21 - 27, 2003, Claudio Dorso, Universidad De Buenos Aires.
- Sept. 14, 2003, Efraín Chávez, Universidad Nacional Autónoma De México, Mexico, D.F., Mexico.
- Sept. 14, 2003, Guillermo Espinosa, Universidad Nacional Autónoma De México, Mexico, D.F.
- Ago. 18 - 20, 2003, Dan Bruton, Stephen F. Austin University.
- Jan. 15, 2003, Alfredo Aranda, Universidad De Colima, Colima, Mexico.
- Nov. 19, 2002, Benjamin Zeidman, Argonne National Lab., Argonne, Illinois.
- Oct. 8, 2002, Alex De Lozanne, University Of Texas At Austin, Austin, Texas.

- Sept. 18, 2002, Efraín Chávez, Universidad Nacional Autónoma De México, Mexico, D.F., Mexico.
- Nov. 29, 2001, [Alfredo Aranda](#), Boston University, Boston, MA.
- Mar. 14, 2001, Marcos Moshinsky, Universidad Nacional Autónoma De México, Mexico, D.F.
- Feb. 10 - 25, 2001, Claudio Dorso, Universidad De Buenos Aires.
- Sept. 21, 2000, Efraín Chávez, Universidad Nacional Autónoma De México, Mexico, D.F., Mexico.
- Apr. 11-13, 2000, Phil Siemens, Oregon State University, Corvallis, OR.
- Jan. 3 - 8, 2000, Armando Barrañón, Universidad Autónoma Metropolitana, Mexico D.F., Mexico.
- Nov. 5 - 7, 1999, Aldo Bonasera, Inst. Nuclear Physics, Catania, Italy.
- 8/20 – 9/9 1999, Armando Barrañón, Univ. Autonoma Metropolitana, Mexico D.F., Mexico.
- 12/20/1998 – 1/5/1999, Armando Barrañón, Univ. Autonoma Metropolitana, Mexico D.F., Mexico.
- Jun. 12 - Jul. 27, 1998, Claudio Dorso, Universidad De Buenos Aires.
- May. 11 - 15, 1998, Raul Donangelo, Universidad Federal Do Rio De Janeiro.
- Feb. 18-20, 1997, Fernando Cristancho, Universidad Nacional De Colombia.
- Mar. 11-14, 1997, T.-S. H. Lee, Argonne National Lab.
- May 29-30, 1997, Shalom Shlomo, Cyclotron Institute, Texas A&M University.
- April, 1996, John Anderson, Jet Propulsion Lab.
- Sep. 28 - Oct. 13, 1996, Claudio Dorso, Universidad De Buenos Aires.

VISIT TO INSTITUTIONS

- 6-8 Dec. 2021, University of Kansas, visiting [Daniel Tapia Takaki](#).
- 18-25 Nov. 2017, Universidad de Buenos Aires, visiting [Dr. Claudio Dorso](#).
- 12-15 Mar. 2017, [AJA International](#) in Scituate MA for training on my new [Orion 5 sputtering system](#). Yes, I was trapped by the snow blizzard that hit Boston on the 14th, [see pictures and training videos here](#).
- May 31 - Aug. 5 2016, Arizona State University with Ricardo Alarcón under a [BUILDing Summer Sabbatical Grant](#).
- June 2 - Aug. 8, 2014, [Nuclear Theory Group](#) of the [Lawrence Berkeley National Lab](#) in Berkeley, CA, with Enrique Ramirez-Homs.
- Jun. 3 - Aug. 9 2013, [Nuclear Theory](#) group of the [Nuclear Science Division](#) of [The Lawrence Berkeley Lab](#), with students Enrique Ramirez Homs and Rodolfo Gonzalez. See here for note in [LBL-NSD newsletter \(p.4\)](#).
- Jun. 4 - Aug. 10 2012, [Nuclear Theory](#) group of the [Nuclear Science Division](#) of [The Lawrence Berkeley Lab](#), with student Enrique Ramirez Homs.
- May 2-7, 2010, Universidad Autónoma de Colima, Colima, Colima, México.
- Dec. 18, 2009, Universidad de Concepción, Concepción, Chile.
- Dec. 12-21, 2009, Universidad Católica de Concepción, Concepción, Chile.
- Nov. 23-26, 2008, Universidad Autónoma de Baja California, Ensenada, B.C. México.
- Nov. 17-18 2008, Texas A&M - Commerce., Commerce, Texas.
- 27/Jul. – 12/Ago. 2008, Universidad Playa Ancha, Valparaiso, Chile.
- May 5-9, 2008, Universidad Autónoma de Colima, Colima, Colima, México.
- May 5, 2008, Universidad Nacional Automa de Mexico, México, D.F..
- Jan. 30-31, 2008, Michigan State U., East Lansing, Michigan.
- Jan. 28, 2008, Argonne National Lab., Argonne, Illinois.

- Nov. 13-14, 2007, Southern Illinois U., Carbondale, Illinois,.
- Nov. 15-16, 2007, Bradley U, Peoria, Illinois.
- May 21-22, 2007, Universidad Autónoma de Sinaloa, Culiacán, Sinaloa, Mexico.
- May 28-Jun 4/2006, Universidad Autónoma de Colima, Colima, México.
- Apr. 23 – 29, 2006, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Feb. 27 – Mar. 2, 2006, Centro de Materiales Avanzados, Chihuahua, Mexico.
- Nov. 23-25, 2005, Universidad Autónoma de Baja California, Ensenada, B.C. México.
- Aug. 31 – Sep. 6, 2005, Universidad Autónoma de Colima, Colima, Mexico.
- Jun. 27–Jul. 8, 2005, Universidad Nacional Autónoma de México, México D.F., México.
- April 29 – May 5, 2005, Universidad Autónoma de Colima, Colima, Mexico.
- Oct. 7, 2004, Arkansas State University, Jonesboro, Arkansas.
- Nov. 23, 2004, Universidad Autónoma de Sonora, Hermosillo, Sonora, Mexico.
- June 1-25, 2004, Universidad Autónoma de Colima, Colima, Mexico.
- April 13-16, 2004, Universidad Autónoma de Colima, Colima, Mexico.
- Mar. 13 - 16, 2004, Universidad Nacional Autónoma de México, México D.F., Mexico.
- Dec. 1-5, 2003, Universidad Nacional Autónoma de México, México D.F., México.
- July/1-31/2003, Universidad Autónoma de Colima, Colima, México.
- Nov. 23 – 28, 2002, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Jul. 2, 2002, Instituto Nacional de Investigaciones Nucleares, Salazar, México.
- Jun. 15 - Jul. 15, 2002, Universidad Nacional Autónoma de México, México D.F., México.
- Mar. 8-9, 2001, Universidad de Montevideo, Montevideo Uruguay.
- Feb. 25 – Mar. 12, 2001, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Aug. 26-29, 2000, Universidad Nacional Autónoma de México, México D.F., México.
- Aug. 28, 2000, Instituto Nacional de Investigaciones Nucleares, Salazar, Mexico.
- Aug. 6 – 21, 2000, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Sep. 11, 1999, Universidad Nacional de Colombia, Bogotá, Colombia.
- Jun. 6, 1999, Universidad Autónoma Metropolitana, México D.F., Mexico.
- Jul.-Aug., 1999, Universidad de Buenos Aires, Buenos Aires, Argentina.
- Jun. 9-10, 1998, Universidad Nacional Autónoma de México, México D.F., Mexico.
- May 1-3, 1997, U. North Texas, Accelerator Facility, Denton, Texas.
- Jun.-Jul., 1997, Universidad de Buenos Aires, Buenos Aires, Argentina, with undergraduate physics student Jaime Morales.
- Jun. 18, 1997, TANDAR (Tandem Accelerator), Buenos Aires, Argentina.
- Jun. 22-29, 1997, Centro Atómico Bariloche, Bariloche, Argentina.
- Sept. 8-13, 1997, Universidad Nacional de Colombia, Bogotá, Colombia.
- Sept. 10, 1997, Centro Internacional de Física, Bogotá, Colombia.
- Sept. 1-5, 1997, Universidad Simón Bolívar, Caracas, Venezuela.
- Nov. 27, 1997, Instituto Nacional de Energía Nuclear, Salazar, Mexico.
- Nov. 27, 1997, Universidad Nacional Autónoma de México, México D.F., Mexico.
- Nov. 28, 1997, Instituto Politécnico Nacional, México D.F., Mexico.
- 5/24 to 6/24, 1996, Jet Propulsion Laboratory, Space and Planetary Sciences Division, Pasadena, CA, with MS physics student Raul Armendariz.
- July 25, 1996, Argonne National Laboratory, Physics Division, Argonne, Illinois.
- Sept. 7-12, 1995, Universidad Simón Bolívar, Caracas, Venezuela.

- Dec. 12, 1995, CEBAF, Theory Group, Newport News, Virginia.
- May 15 to June 14, 1994, Argonne National Laboratory, Physics Division, Argonne, Illinois, with undergraduate physics student Alfredo Aranda.
- Feb. 1994, Oak Ridge National laboratory, Physics Dept., Oak Ridge, Tennessee.
- 7/1 to 8/31, 1993, Lawrence Berkeley Laboratory, Nuclear Theory Group, Berkeley, California.
- June 29, 1993, Jet Propulsion Laboratory, Space and Planetary Sciences Division, Pasadena CA.
- March 21-26, 1993, Lawrence Berkeley Laboratory, Nuclear Theory Group, Berkeley, California.
- May 21-27, 1992, Universidad Autonoma de Mexico, Instituto de Fisica, Mexico City, Mexico
- June 1 to July 31, 1992, Lawrence Berkeley Laboratory, Nuclear Theory Group, Nuclear Science Division, Berkeley, California.
- Sep. 19-23, 1992, Universidade Federal do Rio de Janeiro, Nuclear Theory Group, Physics Dept., Rio de Janeiro, Brazil.
- Aug. 18-22, 1991, Lawrence Berkeley Laboratory, Nuclear Theory Group, Nuclear Science Division, Berkeley, California.
- March and May 1987, University of Lund, Department of Cosmic and Subatomic Physics, Lund, Sweden.
- Nov. 1985, Universita degli Studi di Milano, Physics Department, Milano, Italy.

GRANTS

Dr. Lopez has been the PI and co-PI in over one hundred grant proposals for research, education and outreach activities; 42 proposals have been funded for a total close to \$5 million US dollars.

PROPOSALS PENDING

1. Molecular dynamics of non-separable potentials, Sustainable Horizons Institute - Lawrence Berkeley National Lab, J. Lopez and three students, \$45,000, 6/6/2022 – 8/12-2022.
2. Quantum Machine Learning for Nuclear Physics Applications Workshop, J.A. Muñoz, A. Delgado, J.A. Lopez, DE-FOA-0002514 Quantum Horizons: QIS Research and Innovation for Nuclear Science in Research Opportunity V: Ramping-up engagement, \$25,000, 1/1/2022 – 12/31/2022.

FUNDED PROJECTS

3. Leveraging Inter-University Cooperation to Increase Diversity of Nuclear Physics Researchers in Texas, \$452,278, Department of Energy, Program DE-FOA-0002456, Research Traineeships to Broaden and Diversify Nuclear Physics, S. Yennello, TAMU, PI, Lopez et al. co-PIs, 6/1/2021 – 5/31/2024. UTEP share \$88,181.
4. Using α -shapes to characterize nuclear pastas, Sustainable Horizons Institute - Lawrence Berkeley National Lab, J. Lopez and four undergraduate students, \$54,000, 6/1/2021 – 8/15-2021.
5. UTEP TeachTech Research Cohort (OER/Affordable Materials Initiative), PI: J. Lopez, UTEP, \$3,000, Sep 6, 2019 – Dec. 31, 2020. See [program description here](#).
6. Surface Characterization of Materials, PI: J. Lopez, Department of the Army, Army Research Office (No. 68846-RT-REP), \$404,000, awarded for period 12/1/2015-2/28/2017.
7. UTEP BUILDING Faculty Summer Sabbatical Program, PI: J. Lopez, UTEP, \$14,000, May 31, 2016 - August 31, 2016.
8. Correlation between underground radon gas and dormant geological faults, PI: J. Lopez, Wiemer Family Student Endowment for Excellence, College of Science, \$5,000, awarded for period 12/1/2015-11/30/2016.
9. A Partnership for Minority Education and Research on Black Hole and Neutron Star Binaries, PI: J. Lopez, National Science Foundation, \$570,039, awarded for period 8/1/2011-7/30/2015. (Lopez replaced starting PI Paul Mason, who ran the program from 2011 to 2014).
http://www.nsf.gov/awardsearch/showAward?AWD_ID=0958783
10. Isospin dependence of the nuclear equation of state, PI: J. Lopez, National Science Foundation, \$186,000, Awarded for period 8/1/2011-7/30/2015, http://www.nsf.gov/awardsearch/showAward?AWD_ID=1066031.
11. Hispanic Physics Radio Education Project, PI: J.A. Lopez, co-PI: Arturo Vazquez (Ixtilan Communications), American Physical Society, \$10,000, Feb. 2011.
12. Materials Characterization, PI: J.A. Lopez, UTEP's URI program, \$5,000, Sep. 2010.
13. An Integrative Science Success, Teaching and Retention Program for STEM Education, PI: B. Flores, co-PIs: J. Becvar, H. Knaust, J. Lopez and J. Tinajero, NSF-DUE, \$1,964,912, awarded for period 9/15/2007 to 9/14/2013.
14. Minorities in Radiation Oncology Physics, PIs: M. Manciu and R. Waggener (UTHSCSA), co-PIs: J. Lopez, NIH-RFA-CA05-020, \$535,000.

15. Student Sponsorship at the Fifth Latin American Symposium on Nuclear Physics, PIs: P. Cole and J. Lopez, NSF-International Programs, \$18,000, submitted on 16/12/2003.
16. Modern Physics Simulations, utep MIE's Undergraduate Research Stipends Program, \$12,000 for the period of 1/1/02 to 12/31/03.
17. Nuclear fragmentation, utep MIE's Undergraduate Research Stipends Program, \$6,000 for the period of 1/1/02 to 12/31/03.
18. Development of a Laboratory for Research and Graduate and Undergraduate Education in Surface Studies, with W. Durrer, DoD program, \$119,000, 9/1/2002-8/31/2003.
19. Assessing Virtual Experiments in High School and Preparatoria Students, \$1,705.60, UTEP CIABS, from 9/2000 to 8/2001.
20. Computer Simulations, submitted to UTEP CETAL for \$6,500, 4/2001 to 5/2002.
21. J.A. Lopez, "Physics 2000", UTEP Center for Border Studies, for \$1,750, 1/00 to 6/00.
22. J.A. Lopez, "Web Physics Rendezvous", submitted to NASA-MUSPIN Internet-Based Education/Research Program, on 9/30/98, for \$10,000 for the period of 11/99 to 5/99.
23. Hands-on Physics Activities for K-6th Grade Dual Language Classes. \$12,000, Ysleta School District, Sept.. 1999.
24. J.A. Lopez, "Support for Hispanic Faculty", submitted to the Committee on Minorities of the American Physical Society, for \$2,000 to support travel expenses for the attendance to the TSAPS-El Paso meeting, Oct., 1998.
25. Cooperative Research Program to Study Heavy Ion Reactions, The National Science Foundation and Argentina's CONICET (with C. Dorso), \$32,780 for the period of 6/97 to 4/2001.
26. J.A. Lopez, "Visit to South American Institutions", submitted to UTEP's College of Science and Graduate College, for \$800 for the period of 9/1 to 9/14, 1997.
27. RUI: A Study of Heavy Ion Reactions, The National Science Foundation, requesting \$161,002 for a total project cost of \$182,702, funded with \$90,000, for the period of 6/96 to 4/2001.
28. Computer-Based Laboratory for Modern Physics \$88,574, The National Science Foundation DUE-ILLI-LLD Program, funded in 9/1996.
29. J.A. Lopez, "Detection of Gravity Waves by Autocorrelation Techniques", submitted to the Jet Propulsion Laboratory, requesting \$52,439 for a total project cost of \$66,439 for the period of June 1994 to May 1996. Funded with \$21,600.
30. Physics Workshop for Teachers from Durango Mexico proposal submitted in collaboration with C.H. Cooper to CIABS for \$300 to support Mexican teacher to come to UTEP for a laboratory workshop. Awarded by UTEP's Center for Inter-American and Border Studies in 6/1996.
31. Computer-Based Modern Physics Laboratory \$9,868, UTEP's Model Institution of Excellence, funded in 6/96.
32. Computer-Based Laboratory for Modern Physics \$88,574, The National Science Foundation DUE-ILLI-LLD Program, funded in 9/96 for the period 9/96 – 8/99.
33. "PAPF: Society of Hispanic Physicists", Sloan Foundation award of \$29,200 given by to J.D. Ernst, J.A. Lopez, and C. Ordonez for the formation of a Society of Hispanic Physicists for the period of 9/95 to 5/97.
34. D. Shapira, J. Gomez del Campo, J. McConnell, and J.A. Lopez, "Studies of Heavy Ion Collision Dynamics", submitted to The National Science Foundation in collaboration with Oak Ridge National Laboratory, requesting \$20,000 for the period of 9/94 to 8/96.
35. J.A. Lopez, "AWU Faculty Fellowship", requested to Associated Western Universities (sponsored by the US Department of Energy) on February 1992, \$10,000 for the period of 7/1/1993 to 8/31/1993.

36. J.A. Lopez, "Transition State Treatment of Nuclear Fragmentation", submitted to The National Science Foundation, requesting \$77,394 for a total project cost of \$89,374, for the period of June 1, 1993 to May 31, 1995. Funded for \$54,000.
37. Excellence in Technology, Engineering, and Science Grant NASA PACE/MSET Grant, in collaboration with J. M. Herrera, S. Stafford, W. Fisher, and L. Diaz-Rios, \$300,000, 9/95 to 8/98.
38. Computational Physics, \$6,800, submitted to the College of Science, funded in 9/94.
39. NASA Physics Centers, \$84,000, funded by NASA Johnson Space Center, from 9/94 to 1997. To do outreach activities, including math and physics tutoring at five high schools through the "NASA Physics Centers" established at each of the selected high schools.
40. J.A. Lopez, "AWU Faculty Fellowship", requested to Associated Western Universities (sponsored by the US Department of Energy) \$9,000 for the period of June 1, 1992 to July 31, 1992.
41. J.A. Lopez, "Nuclear Projectile Breakup", submitted to The Center for Environmental Resource Management - UTEP, requesting \$5,850 for the period of October 1991 to May 1992.
42. J.A. Lopez, "Nuclear Disassembly", submitted to The University Research Institute, UTEP, 11//1991 to 8/1992. Funded for \$1,250.
43. J.A. Lopez, "JPL's Minority Initiative", submitted to The Office of Sponsored Projects, UTEP, \$347 for the period of January 22, 1991 to January 25, 1991.
44. El Paso Physics Link, J.A. Lopez and C.H. Cooper, submitted on March 1993 to UTEP's MRCE, requesting \$10,000 for additional funding for the summer program of the GTE funded project, for the period of June 1, 1993 to June 30, 1993.
45. El Paso Physics Link, \$30,000, submitted to GTE, in collaboration with Clarence Cooper, from 1993 to 1995. To do outreach activities and summer research experiences with high school students and physics teachers.
46. J.A. Lopez, "Disassembly of Nuclear Drops", submitted to The Center for Environmental Resource Management - UTEP, \$9,000 for the period of October 1990 to May 1991.
47. J.A. Lopez, "Transition State Treatment of Nuclear Fragmentation", submitted to The University Research Institute - UTEP, for the period of November 1990 to August 1991. Funded for \$2,600.

AWARDS AND HONORS

Dr. Lopez has been recognized by The American Physical Society, Society of Mexican American Engineers and Scientists, University of Texas at El Paso, Texas A&M University, Universidad Nacional Autónoma de México, Juárez Municipal Government and other institutions; he is also proud of the recognitions received by his students while under his supervision.

AWARDS

- 2022 Faculty Development Leave, UTEP – Office of the Provost, 7/22/2021.
- 2021 President Elect, [UTEP Academy of Distinguished Teachers](#), 2021-2022, UTEP.
- 2020 UTEP nominee for the Minnie Stevens Piper Professor Award, 11/2020.
- 2020 HENAAC Education Distinction, Great Minds in Science – HENAAC, Oct/5-9/2020, Montebello, CA (via online). [HENAAC Award web page](#).
- Inducted into the [UTEP Academy of Distinguished Teachers](#), 28/April/2019, UTEP, El Paso, Texas.
- Recognition of Excellence from the Texas Higher Education Coordinating Board, Austin, Texas, Apr. 25, 2019. See a 12 min excerpt of the webcast of the meeting showing [the Lopez participation here](#). See the [complete webcast of the Board meeting here](#), it lasts six hours and the Recognition of Excellence for Drs. Dimitiu, Karp, Villalobos and Yours Truly runs from 2:07:00 – 2:45:00.
- Selected as 2018 NATURE Lifetime Achievement Award for Mentoring. Dec. 18, 2018. See [Nature article here](#) and [SpringerNature article here](#). See UTEP's [news release and video here](#), video with [Spanish subtitles here](#). See the news report in [Spanish in El Diario de El Paso](#), the report in [El Diario de Juarez](#), and the report in [The Herald Post](#).
- Grand Marshall of the 2018 UTEP Winter Commencement. [See video here](#) and [President Natalicio's remarks here](#). Dec. 15, 2018.
- The Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) from the White House and the National Science Foundation, Ju. 25-27-2018. [See announcement here](#), the [PAESMEM page here](#), the [personalized PAESMEM page here](#), the [UTEP announcement here](#), the Spanish language news in [El Diario here](#), and some [pictures here](#).
- Inducted into the [Academy of Distinguished Former Students of Texas A&M University](#), College Station, Texas, 22/Mar/2018. [See complete information here](#).
- 2017 UTEP College of Science Best Thesis Research Mentoring Award, UTEP, Dec. 12, 2017. [See diploma here](#), for work with [Karla Rosita Téllez-Girón Flores](#).
- 2016 UTEP CoS-BUILDing Scholar Mentoring Award, Awarded by the NIH-funded BUILDing SCHOLARS Center, UTEP, Sep. 29, 2016. [See notification here](#).
- 2016 University of Texas Regent's Outstanding Teaching Award, Austin, TX, Aug. 24, 2016. [See notification here](#). and [official website here](#). See some [pictures here](#) and [UTEP Magazine article here](#)
- 2015 Edward A. Bouchet Award, American Physical Society, received at the April Meeting of the APS, Baltimore, MD 4/11-14/2015, <http://www.aps.org/programs/honors/awards/bouchet.cfm>.

- 2014 Mentoring Award, Division of Nuclear Physics, American Physical Society, received at the 4th Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, Waikoloa, Hawaii, 10/10/2014, <http://www.aps.org/units/dnp/awards/mentoring.cfm>.
- Elected as Corresponding Member of the Mexican Academy of Sciences, 4/12/2012, Mexico City.
- 2011 Educator of the year, for academic achievements, Society of Hispanic Professional Engineers, Oct. 26, 2011, Anaheim, CA, <http://conference.shpe.org/shpe2011/awards-show-graduate>.
- 2010 Outstanding MAESTro Award, for academic achievements, Society of Mexican American Engineers and Scientists, 10/1/2010, Long Beach, CA, <http://www.maes-natl.org/docs/pressreleases/2010-12A.pdf>.
- 2009 Hyer Award, for research with undergraduate student Jorge Muñoz, Texas Section of American Physical Society, 10/2009, www.aps.org/units/tsaps/awards/hyer/recipients-09.cfm.
- Fellow, elected by the American Physical Society, 2007, co-nominated by Div. Nuclear Physics and Forum of International Physics. Citation: "For contributions to nuclear physics, in particular for the understanding of the liquid-gas nuclear phase transition, and for support of the development of physics in Latin America through research and development collaborations, organization of symposia, and recruitment of students. www.aps.org/programs/honors/fellowships/archive-all.cfm?initial=L&year=2007&nom_unit=&institution=University+of+Texas
- Cátedra Ángel Dacal Alonso, awarded by the Instituto de Física, Universidad Nacional Autónoma de México, to visit IF-UNAM from 6/15 to 7/14, 2002, MX\$20,000.
- CUESTA Faculty Fellowship, UTEP-NASA (Jet Propulsion Lab), 1996.
- Rho-Sigma-Tau Schumaker Professor, UTEP, since 2001 to date.
- Meritorious Performance and Professional Promise Award, CalPoly, San Luis Obispo, 1990.
- Affirmative Action Faculty Development Program Award, given by The Graduate Studies, Research and Faculty Development Office of CalPoly, San Luis Obispo, February 1990.
- Graduate Student Award, given by the Association of Former Students of Texas A&M University for the Best Doctoral dissertation in the 85-86 academic year.

OTHER AWARDS AND HONORS

- Article "Understanding a Physicist's Work to Explore the Stars and His Community: An Interview with Dr. Jorge Lopez from the University of Texas at El Paso", written by Andrew Lowrance, Journal of Young Investigators, Nov. 1, 2019, Vol. 37, Pp. 43-44, [see article here](#).
- Article Spotlight "[Topological characterization of neutron star crusts](#) selected to appear in *Physics-Spotlighting Exceptional Research: Italian Delicacies Served Up in a Neutron Star Crust*, Nov. 29, 2012.
- *Reconocimiento*, awarded by the H. Ayuntamiento de Juárez, 12/2003, Cd. Juárez, México.
- APS Centennial Speaker, named by the American Physical Society, to deliver talks at three Universities. 1998-1999. Talks given at Texas Tech University in Lubbock, Texas, Dec. 1998, Southern Illinois University in Carbondale, Illinois, Oct. 99, and St. Edwards University, Austin, TX.
- *Reconocimiento*, awarded by the H. Ayuntamiento de Juárez, 12/99, Cd. Juárez, México.
- 1997 Parental Involvement in Science, Eastwood Heights Elementary School, El Paso, Texas.
- 1996 Parental Involvement in Science, Eastwood Heights Elementary School, El Paso, Texas.
- 1995 Parental Involvement in Science, Eastwood Heights Elementary School, El Paso, Texas.

AWARDS OF STUDENTS

- UTEP Best MS Thesis Award:
 - Karla Rosita Tellez-Giron Flores, 2017, College of Science Best Thesis Award, 2017
 - Christian Escudero, Science & Engineering Award for Outstanding Graduate Thesis, 2008
 - Jesus Escamilla, Science & Engineering Award for Outstanding Graduate Thesis, 2004
 - Raul Armendariz, Science & Engineering Award for Outstanding Graduate Thesis, 1996
- UTEP BUILDing Fellowships:
 - Yahir Garay, 2017-2020
- UTEP MARC Fellowships:
 - Israel Chavarria, 2015-2017
 - Enrique Ramirez-Homs, 2012-2014
 - Miguel Bencomo, 2010-2012
- Commencement:
 - Alan Davila, Banner Bearer, May, 2008.
 - Juan Garcia, profile presentation, May, 2010.
 - Jorge Muñoz, profile presentation, May, 2009.
- Best Undergraduate Presentation, Texas Section of Am. Physical Society:
 - Jorge Muñoz, 2006.
 - Martha Navarro, 1999.
 - Alfredo Aranda, 1996.
 - Richard Coronado, 1996.
 - Alfredo Aranda, 1994.
- NSF Graduate Research Fellowship:
 - Jaime Morales, 1998.
 - Mario Borunda, 1998 (Recognition).
 - Richard Coronado, 1996.
- Other:
 - Michel Luna, 2 month summer appointment through the UTEP Graduate School Summer Research Funding Program, 5/30/2021.
 - Daniela Ramirez, participation in the 32nd National Nuclear Physics Summer School of Indiana University and Universidad Nacional Autonoma de Mexico. 6/21–25/2021.
 - Yahir Garay, Diana Carrasco Rojas, Jahayra Chairez, and Jacob Mireles, received summer fellowships to participate in the project “Using α -shapes to characterize nuclear pastas”, Sustainable Horizons Institute - Lawrence Berkeley National Lab, \$9,000 each, 6/1/2021 – 8/15/2021.
 - Adrian Gaytán, travel and lodging award to attended the [2019 Exotic Beam Summer School](#) at Oak Ridge National Lab. June 24 - 29, 2019.
 - Gicela Saucedo, Travel and lodging award to attend the NS³ Nuclear Science Summer School at the National Superconducting Cyclotron Laboratory of the Michigan State University, 13-19/May/2018. [See picture here.](#)

- Alan Salcedo, Travel and lodging award to attend the Conference Experience for Undergraduates, 2017 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, 25-28 October, 2017, Pittsburg, PA.
- Alan Salcedo, MIT Summer 2017 Research Program, summer 2017
- Alan Salcedo, Travel and lodging award to attend the NS³ Nuclear Science Summer School at the National Superconducting Cyclotron Laboratory of the Michigan State University, 14-20/May/2017. [See picture here.](#)
- Karla Tellez Giron, Travel award to attend the Winter School on Nuclear Astrophysics, Shanghai Jiao Tong University, Shanghai, China. [See here for more information](#), Dec. 12 – 17, 2016.
- Alan Salcedo, COURI Undergraduate Research Program Assistantship, summer 2016.
- Israel Chavarria, Travel Award for Conference Experience for Undergraduates in Vancouver, BC CA, sponsored by the Division of Nuclear Physics, APS, Oct. 13-16, 2016.
- Israel Chavarria, Victor Blanco Fellowship, to participate in Fermilab's summer research program, Summer 2016.
- High School student Alejandra Robles, member of my XRF group, Most Outstanding Award in the El Paso Independent School District Science Fair, January 26, 2013.
- UTEP nominee for 2005 USA Today's US Academic Team, my BS student Alan Davila, December, 2005.