



# Mathematical Sciences 2026 Colloquium Series



**Dr. Piotr J. Wojciechowski**, Professor  
Department of Mathematics University of Texas  
at El Paso (UTEP).



March 6, 2026, at 3:00pm  
Bell Hall, Room 130 and online  
via Zoom *Scan the QR-code to access  
the link.*



## Conclusiveness of planar digraphs.

**Abstract:** We consider transitive systems built on transitive digraphs. Edges of such digraphs are assigned abelian group-valued weights obeying the triangle equality. We address the possibility of extending such system to a complete weighted digraph obeying the triangle equality. For some classes of these digraphs, it can be determined whether every transitive system can be completed or not, just by the digraph alone, independently of the group. These classes include all planar transitive digraphs. This topic has some potential applications.

Hosted by: Dr. Emil Schwab.

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