



The rising STAR of Texas

Discrete Mathematics Seminar

Time: Friday, October 21, 2022, 2:00-3:00 PM (Central Time)
Title: Recent Developments on the Slice Rank Polynomial Method with Applications
Speaker: Dr. Mohamed Omar, Department of Mathematics, Harvey Mudd College
Room: 330 Derrick Hall

Abstract:

The slice rank polynomial method, motivated by groundbreaking work of Croot, Lev and Pach and refined by Tao, has opened the door to the resolution of many problems in extremal combinatorics. We survey these results and discuss contributions in the speaker's recent papers.

Bio:

Mohamed Omar is Associate Professor of Mathematics and Joseph B. Platt Chair in Effective Teaching at Harvey Mudd College. His research is in algebraic methods in graph theory and combinatorial optimization. In addition to his research Omar is heavily involved with mathematics outreach and increasing diversity in STEM. He has won numerous awards for his research and service. He was selected in the 2020 Class of Karen EDGE Fellows, and was awarded the Inaugural Claytor-Gilmer Fellowship of the American Math Society.