



Department of
Mathematical Sciences

Colloquium

Dr. Mohamed Omar

Associate Professor of Mathematics

Harvey Mudd College

Friday,
October 7th, 2022
@ 2:00pm

EMS Building, E495



**Dr. Mohamed
Omar**

UW-Milwaukee
Department of
Mathematical Sciences

EMS Building, Room E403
3200 North Cramer Street
Milwaukee, Wisconsin
53211
414-229-4836

How Many Cards Can Avoid a SET?

SET is a popular real-time card game where players search for special triples of cards among a table of cards that are face-up. A common issue when playing the game is not having a SET among the face-up cards. What is the maximum number of cards that can be face-up while avoiding a SET? Surprisingly, this question is at the heart of a decades old central problem in extremal combinatorics and additive number theory that had a major breakthrough in 2017. In this talk, we describe the breakthrough, and how the presenter used ideas in its development to make headway on a range of disparate problems in combinatorics.

**Refreshments will be served in EMS E495
following this event.**



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