

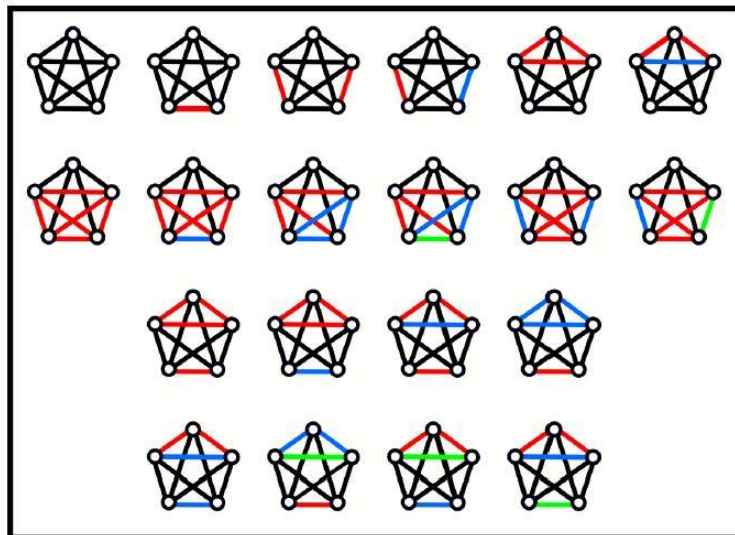
# *Graduate Math and Physics Seminar*

## Enumerating Diagonalizable Matrices

**Dr. Brian Sittinger**

*California State University, Channel Islands*

**Abstract:** Diagonalizing a square matrix (usually over the real or complex numbers) is a powerful idea that has widespread applications beyond Linear Algebra. We can make an enumeration problem out of this idea by assuming that the entries of a given square matrix come from a finite ring or field. In this talk, we investigate this problem in the context of the ring of integers modulo a power of a prime number. I will outline how my REU group from a couple of summers ago approached this problem and gave a rather surprising method to effectively solve it.



*When:* Monday, April 22, 2019, 6:00 – 6:50 pm

*Where:* CSUCI, Sierra Hall 2411

One University Drive, Camarillo, California 93012-8599 Tel: (805) 437-8967 Fax: (805) 437-8864 [www.csuci.edu](http://www.csuci.edu)