The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University

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Mathematical Questions in Redistricting and Detecting Gerrymandering

WED MAR 13, 2024, MH320

Abstract: Please come learn how your skills and expertise as a mathematician can be used to improve our democracy! We'll discuss what redistricting is, and mathematical metrics that can help to determine whether or not a redistricting map is "fair." We'll also learn about the redistricting "metagraph," which is (as you probably guessed) a graph of graphs. The structure of this metagraph is unknown, and has impacts on whether a tool that is frequently cited in courts does a good job of sampling potential redistricting maps. Finally, we'll look at two-player-games as a process to create a redistricting map.

Background: Students should have seen graphs (as in discrete math).

About the speaker: Ellen Veomett earned her PhD from U. Michigan in 2007 and her MS in Computer Science from UIUC in 2023. Her background is in Discrete and Computational Geometry, and recently she has focused on mathematical and computational techniques to analyze gerrymandering, redistricting, and fairness in machine learning.

SNACKS IN MACQUARRIE HALL 331B AT 2:40PM
TALK STARTS AT 3:00PM

For more information, see our full schedule at:

`http://www.timhsu.net/colloq/`