

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



Ellen Veomett St. Mary's College of CA

The Mathematician and the Mapmaker: Using Mathematics to Combat Gerrymandering

May 6, 2020, via Zoom

Abstract: Gerrymandering is generally understood to be the drawing of political districts in order to benefit one group and dilute the voting power of another group. In recent years, mathematicians have become deeply involved in the geometry of redistricting and the evaluation of districting maps. In this talk, we will discuss some techniques that have recently been used in court cases to argue the presence of partisan gerrymandering. We will discuss research on particular metrics intended to detect gerrymandering, as well as statistical techniques using Markov Chain Monte Carlo.

Background: Any experience with upper-division math.

About the speaker: Ellen Veomett is a Professor at Saint Mary's College of California. Her research is in discrete geometry, focusing recently on the mathematics of redistricting and gerrymandering. When not discussing math over Zoom or sheltering-in-place with her husband, 3-year-old, and 5-year-old, Dr. Veomett likes to get outside for long runs (6 feet away from others, of course).

COLLOQUIUM BROADCAST VIA ZOOM, 3PM PACIFIC/6PM EASTERN EMAIL tim.hsu@sjsu.edu FOR AN INVITATION

For more information, see our full schedule at:

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