



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



Sarah Cannon

Claremont McKenna Coll.

*Understanding Gerrymandering
with Random Sampling*

WED OCT 11, 2023, MH320

Abstract: How can you tell if a political districting plan is gerrymandered? This is a hard question — compactness of districts or proportionality of election outcomes don't tell the whole story. One method is to look at where a districting plan falls within the space of all possible districting plans — if it's an outlier, it might be gerrymandered. There are far too many possible districting plans to look at all of them, so instead we use random sampling via Markov chains. This talk will cover how these Markov chains work, what we know about how they behave, and some of the many open questions that remain.

Background: No particular background necessary.

About the speaker: Sarah Cannon is an Asst. Prof. of Mathematics at Claremont McKenna Coll. She has worked at the intersection of math and CS throughout her entire career, which includes a BA from Tufts Univ., a Master's degree from the Univ. of Oxford, a PhD from Georgia Tech, and a NSF postdoc at UC Berkeley.

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/>