

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





## Natalie Hobson Sonoma State Univ.

You Decide! How the math behind our voting systems swings the election

Oct 14, 2020, via Zoom

Abstract: Do you think voter turnout, policy issues, and debate performance will determine the upcoming election? Well it turns out the math behind the voting system itself can have a significant influence on the winner. In fact, different fair voting systems can lead to different outcomes in an election even when the same ballots are used. Given this issue, how is power in the US Electoral College currently distributed across states? In this talk, we will investigate the voting paradox and discuss current power distributions in elections.

Background: Only creativity and an open mind.

About the speaker: Dr. Natalie Hobson is an assistant professor of math and statistics at Sonoma State Univ. She holds a PhD in math and a master's degree in math education from U. Georgia. She loves working with students and working to make math more accessible through outreach programs. Outside of math, Natalie has many interests, some of which include biking, yoga, swing dancing, gardening, bird watching, sewing, and cooking new food!

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COLLOQUIUM BROADCAST VIA ZOOM, 3PM PACIFIC/6PM EASTERN
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