

California State University, Fresno
Spring 2007 Interdisciplinary Mathematics Lecture Series

presents

MICHAEL ORRISON

Harvey Mudd College

“Voting from an Algebraic Perspective”



Friday, March 16, 2007 from 4:00 to 5:00PM
IT 101

If the results of your election procedure can be realized as a matrix-vector product, then linear algebra can probably say something interesting about the way you are voting. In this talk, I'll describe some of the recent work that my students and I have been doing to better understand voting and voting paradoxes from an algebraic perspective. In particular, I'll talk about the interesting (and very natural) role that the symmetric group has played in our work to date.

This is joint work with Zajt Daugherty, Alex Eustis, Marie Jameson, and Greg Minton.

Michael Orrison is an assistant professor of mathematics at Harvey Mudd College. He received his A.B. from Wabash College and his Ph.D. from Dartmouth College. Having a father in the Air Force meant that he moved around as a kid: Colorado to Holland to Michigan to Holland to Texas to Michigan and, finally, Illinois, where he spent all four years of high school. His research interests include algebra, graph theory, voting theory, and computational noncommutative harmonic analysis. When he is not thinking about mathematics, he enjoys spending time with his wife and children, plunking around on their digital piano, and watching way too much TV.

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