mᐁth Math for Everyone

talks and discussions especially for undergrads

Voting in Agreeable Societies

Francis Edward Su
Harvey Mudd College

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When do majorities exist? How does the geometry of the political spectrum influence the outcome? What does mathematics have to say about how people behave? When mathematical objects have a social interpretation, the associated theorems have social applications. We give examples of situations where sets model preferences, and prove extensions of classical theorems on convex sets such as Helly's theorem that can be used in the analysis of voting in "agreeable" societies. This talk also features research with undergraduates.