

Graduate Theoretical Computer Science Seminar

Social choice theory and Fourier analysis: a simple proof of Arrow's Impossibility Theorem

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Abstract: This talk will give an introduction to social choice theory, a theoretical framework for studying how to aggregate individual preferences into a social welfare function, concentrating on Arrow's Impossibility Theorem. This talk will present a proof of this theorem (due to Kalai, 2002) using the Fourier analysis of Boolean functions, which is both a surprising and elegant application of Fourier analysis.

Wednesday, September 2 at 3:00 PM in SEO 427