The SUMO Speaker Series for Undergraduates
Thursday, February 13th
4:15-5:05, room 380C
(Food Provided)

Discontinuities in Optimal Maps
Otis Chodosh

Abstract:
Optimal transport asks to find the "cheapest way to move things between two configurations." This problem, with obvious economic applications, was born in 1781, and so is a very old field. However, in the past 30 years or so, there have been numerous exciting developments in the field, linking this rather applied question to numerous fields of pure mathematics. In my talk I will discuss some basics of optimal transport and describe some recent results concerning the question of when the "optimal map" between two configurations fails to be continuous. This research was carried out with Vishesh Jain, Michael Lindsey, Lyuboslav Panchev and Yanir Rubinstein in our SURIM group as a summer research project. I will try to convey what such an experience is like and discuss research by undergraduate students.

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