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Connor is an Associate Professor and Chancellor's Fellow at Department of Mathematics, UC Irvine. He obtained his B.S. degree from Stanford University in 2011 and his Ph.D. from Columbia University in 2015. He was then NSF Postdoctoral Research Fellow at UT Austin in 2015-2016 and a postdoc researcher at ETH Zürich in 2016-2018. He moved to UC Irvine in 2018 until now. Connor's research expertise is in Calculus of variations, Minimal surfaces, and partial differential equations.

Title: Optimal transport maps of non-convex domains

Abstract:

Optimal transport plays a central role in economics, meteorology, and geometry. The regularity theory of optimal transport maps is delicate, and for the most part has focused on the case that the source and target domains are convex. I will discuss some sharp regularity results for optimal transport maps of planar domains with concave boundary portions. This is joint work with A. Rakshit.