# Colloquium

## University of Notre Dame
## Department of Mathematics

## Speaker: Yi Lai

Stanford University

**Will give a lecture entitled**
Ricci flow and Hamilton's flying wing Conjecture



**Date:** Monday, December 4, 2023
**Time:** 4:00 PM
**Location:** 129 Hayes-Healy Bldg

**Departmental Tea:** Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

**Zoom URL:** notredame.zoom.us/j/94209026501?
pwd=d0hDdmRua0JETFV6MkpPSWFJZkZDQT09 Meeting ID: 942 0902 6501 Passcode:
596816

## Abstract:

Ricci flow is an important tool in geometric analysis. There have been remarkable topological applications of Ricci flow on closed manifolds, such as the Poincaré Conjecture resolved by Perelman, and the recent Generalized Smale Conjecture resolved by Bamler-Kleiner. In contrast, much less is known about the Ricci flow on open manifolds. Solitons produce self-similar Ricci flows, which often arise as singularity models. Collapsed singularities and solitons create additional difficulties for open manifolds. In this talk, I will survey some recent developments in Ricci flow on open manifolds. In particular, I will talk about the resolution of Hamilton's flying wing Conjecture, and the resulting collapsed steady solitons.

Yi Lai - Stanford University