

GEOMETRIC ANALYSIS SEMINAR

Speaker: Nicholas McCleerey

University of Michigan

Date: Thursday, April 21, 2022

Time: 11:00 AM

Location: 258 Hurley Hall

Zoom URL: <https://proxy.qualtrics.com/proxy/?url=https%3A%2F%2Fnotredame.zoom.us%2Fj%2F92401096006%3Fpwd%3D>



Lecture Title:

Lelong numbers of m -subharmonic functions along submanifolds

Abstract

We study the possible singularities of an m -subharmonic function φ along a complex submanifold V of a compact Kähler manifold, finding a maximal rate of growth for φ which depends only on m and k , the codimension of V . When $k < m$, we show that φ has at worst log poles along V , and that the strength of these poles is moreover constant along V . This can be thought of as an analogue of Siu's theorem. This is joint work with Jianchun Chu.