## **Department of Mathematics** University of Notre Dame

# GRADUATE STUDENT GEOMETRY SEMINAR

#### **Guest Speaker: Khoi Nguyen University of Notre Dame**

Date: Wednesday, November 29, 2023 Time: 12:00 PM Location: 258 Hurley Bldg Zoom URL: NA



### *Lecture Title:* Urbano's Theorem - The Special Feature of the Clifford Torus

#### Abstract

Understanding the nature of minimal surfaces of different Riemannian manifolds has been a recurring question in geometric analysis. In particular, the index of a minimal surface has been a subject of investigation for many years. In this talk, I will give a brief overview of the theory of minimal surfaces, specifically towards defining the index of a minimal surface. Then, I will state and explain the proof of Urbano's theorem, which relates the index of minimal surfaces of  $S^3$ . This theorem hints at the special feature of the Clifford torus, which comes up in a lot of places in mathematics.