

# ***GRADUATE STUDENT GEOMETRY SEMINAR***

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

**Date:** Friday, February 2, 2024

**Time:** 2:00 PM

**Location:** 117 Hayes-Healy Bldg

**Zoom URL:** NA



***Lecture Title:***

**Urbano's theorem - the special feature of the Clifford torus  
(Revised)**

***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.