## Yuyan He - University of Notre Dame

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

## MATHEMATICS TEACHING SEMINAR

Guest Speaker: Yuyan He

**University of Notre Dame** 

Date: Tuesday, February 20, 2024

**Time:** 5:00 PM

Location: 125 Hayes-Healy Bldg

**Zoom URL:** NA



Lecture Title:

**Mock Lecture: Change of Variables in two variables** 

## Abstract

Change of variables allows us to simplify integrating functions in several variables, either through simplifying the form of the integrand, or the shape of the domain. I will introduce the change of variables formula, and give geometric motivation for the role of the Jacobian through examples. At the end I will explain the formula for integrating in polar coordinates as change of variables.