# Mathematical Sciences
# Spring 2024 Colloquium Series

## Dr. Jan Lang

The Ohio State University

# Different degrees of noncompactness for Sobolev type embeddings

**Friday, March 8 at 2:00 pm**
**in Bell Hall 130 and online via Zoom**
*Note the unusual time*
*Scan the QR code to access the Zoom link*


## Abstract

Sobolev embeddings play an essential role in theory of Partial Differential Equations and information about quality of this embeddings is fundamental for estimates of spectra for corresponding Laplace and $p$-Laplace type operators. Usually there is a focus on quality of compactness of such embeddings but in this talk we will try to focus on the situation when Sobolev Embedding is non-compact. We will focus on some non-compact ``optimal" Sobolev embeddings and try to study their behavior (using different tools like entropy numbers, $s$-numbers and concept of strict singularity).


**Host: Dr. Osvaldo Méndez (osmendez@utep.edu)**

**For further information, please contact Dr. Emil Schwab, eschwab@utep.edu**