Indiana University-Purdue University Indianapolis
Department of Mathematical Sciences

Statistics Seminar

12:15pm—1:15pm, Tuesday, September 19, 2023
Zoom Meeting: Meeting ID: 845 0989 4694

Speaker: **Jiayue Wang**
Department of Mathematical Sciences, IUPUI

Title: **Early Detection of Two Possible Side Effects: A Sequential Approach**

Abstract:

In this talk, we will summarize our earlier results on the one-dimensional case (single side-effect) and present some new results on the two-dimensional case (two possible side-effects). Some auxiliary results will be presented leading to our optimal sequential test for early detection. Along the way, we study the properties of the Average Sample Number (ASN) of the proposed sequential testing procedure. Additionally, we discuss the construction of post-test estimates for the unknown parameters and address some of the potential concerns.