

**Indiana University-Purdue University
Indianapolis**
Department of Mathematical Sciences

STATISTICS SEMINAR

12:15pm—1:15pm, Tuesday, April 19, 2022
Zoom Meeting: Meeting ID: 845 0989 4694

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

Title: **Exact sequential test for binary type data**

Abstract:

In sequential analysis, hypothesis testing is performed repeatedly in a prospective manner as data accrue over time to quickly arrive at an accurate conclusion or decision. The authors describe the calculation of exact thresholds for stopping or signaling, statistical power, expected time to signal, and expected sample sizes for sequential analysis with relative risk of binary type data. The calculations are run using the R package Sequential. Real data examples are inspired on clinical trials practice, such as the current effort to develop treatments to face the COVID-19 pandemic.