

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

STATISTICS SEMINAR

12:15pm—1:15pm, Tuesday, September 29, 2020

Zoom Meeting: Meeting ID: 751 025 519

**Speaker:** Jiayue Wang

*Department of Mathematical Sciences, IUPUI*

**Title:** Bayesian Modeling of COVID-19 Positivity Rate: the  
Indiana experience

**Abstract:**

We model the rate of positive tests reported by the the State of Indiana within the Bayesian framework, accounting also for the substantial variability (and overdispersion) in the daily count of the tests performed. The approach we take, results with a simple procedure for prediction, a posteriori, of this rate of positivity and allows for an easy and a straightforward adaptation by any agency tracking daily results of COVID-19 tests.