

Statistics Seminar  
Department of Mathematical Sciences

|                  |   |
|------------------|---|
| <b>DATE:</b>     | Thursday, September 28, 2017                                      |
| <b>TIME:</b>     | 1:15pm - 2:15pm   |
| <b>LOCATION:</b> | WH 100E   |
| <b>SPEAKER:</b>  | Jihnhee Yu, SUNY Buffalo  |
| <b>TITLE:</b>    | Applications of empirical likelihood methods to some U-statistics |

**Abstract**

Empirical likelihood approach with U-statistics is explained. The summands of U-statistics are not independent, and empirical weights of each summand may not have a direct interpretation as a probability point mass, dissimilar to the common empirical likelihood constraints based on independent summands. The resulting empirical likelihood ratio statistics have asymptotically weighted chi-square distributions. The proposed methods applied for some well-known U-statistics have robust Type I error control under various underlying distributions including cases with the violation of exchangeability under null hypotheses. A few applications including receiver operating characteristic curve analysis and testing in a cross-over design are presented.

From:  
<http://www2.math.binghamton.edu/> - **Binghamton University Department of Mathematical Sciences**

Permanent link:  
<http://www2.math.binghamton.edu/p/seminars/stat/170928>

Last update: **2017/09/20 19:15**

