

# 國家理論科學研究中心數學組（臺北辦公室）

## IAMS / NCTS-TPE Applied Math Seminar

**Speaker:** Wei-Yann Tsai (Department of Biostatistics, Columbia University, USA)

**Title:** An alternative approach to condence interval estimation for the win ratio statistic

**Abstract:**

Pocock et al. (2012) proposed a win ratio approach to analyzing composite endpoints comprised of outcomes with different clinical priorities. In this paper, we establish a statistical framework for this approach. We derive the null hypothesis and propose a closed-form variance estimator for the win ratio statistic in all pairwise matching situation. Our simulation study shows that the proposed variance estimator performs well regardless of the magnitude of treatment effect size and the type of the joint distribution of the outcomes.

**Time:** Dec. 26 (Fri.) 14:30 – 16:00

**Venue:** R202, Astro-Math Building (NTU Campus)

**Organizer:** Jenn-Nan Wang (NTU)

For more information, please refer to <http://www.cts.ntu.edu.tw/>, or contact [cts\\_tpe@math.cts.ntu.edu.tw](mailto:cts_tpe@math.cts.ntu.edu.tw).