

# NTU Math Seminar

**演講者**：Chuan-Fa Tang (University of Washington)

**講題**：Likelihood ratio test for monotonicity density

**時間**：2019年1月22日 (星期二) 11:00 - 12:00 a.m.

**地點**：臺灣大學天數館 440 室

**摘要**：We study the likelihood ratio test statistic for a lasting, but unconventional, hypothesis testing problem on whether a random sample follows a distribution with a nonincreasing density function. The obtained test statistic has a surprisingly simple asymptotic null distribution, which is Gaussian, instead of the well-known chi-square for generic likelihood ratio tests. Also, the limiting distribution does not depend on the underlying density but on some universal constants such as the Euler-Mascheroni constant. The underlying density only plays a role in the higher-order effect, whereby modifications to the test statistic are suggested.

**茶會**：13:30-14:00 (天數館 519 室)

相關事宜請與顏湘伶小姐聯絡 Tel:(02)3366-2822 歡迎上網查詢 網址：<http://www.math.ntu.edu.tw>