

# 国家数学与交叉科学中心

Time: 10:00-11:30 am, May 25, 2012

Venue: Hall

## Removing Unwanted Variation



### Speaker: Prof. Terence P Speed

Division of Bioinformatics, the Walter & Eliza Hall Institute of Medical Research, Australia

### Abstract:

Principal components have been used to a lot with microarray and other data to exhibit unwanted variation, and to some extent to remove such variation. Such efforts are also called normalization. In this talk I will veriew some of these methods, and related work, and propose some simple but apparently novel variants which work a lot of the time, though not always. Part of my story will be a discussion of how one tells whether one is helping or hurting the analysis by adjusting one's data. In addition, I'll mention metabolomic and perhaps other data, as well as giving an easy introduction to microarray normalization.

#### Brief CV:

Terence P Speed 教授生于 1943年 3 月 14 日。他是著名的澳大利亚籍統计学家,以其在方差分析、生物信息学 以及生物基因数据分析方面的杰出工作面闻名于世。其一生获誉无数,曾担任国际数理统计学会的主席以及伯 克利统计系主任。同时他还是北美著名的辛普森谋杀案的专家证人 (1995 年引起北美轰动,被希为爽固历史上 最广为认知的犯罪案例,并登上时代周刊封面)。他在伯克利统计系指导了几十名博士研究生,包括现在伯克利 统计系主任称秘教授和教学院的李昌研究员