

# 国台学术报告 NAOC COLLOQUIUM

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**TIME: Tuesday, 2:30 PM, June 18, 2013**    **LOCATION: A601 NAOC**

## How much information can be measured in the Universe?

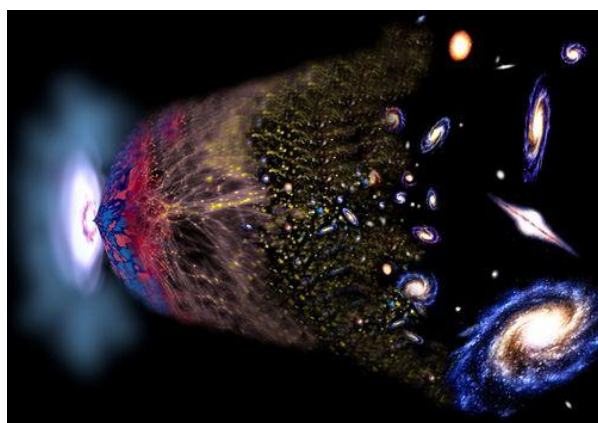
**Dr. Yin-Zhe Ma (University of British Columbia)**



Dr. Yin-Zhe Ma is currently a CITA national fellow at University of British Columbia, Canada. He received his PhD at Institute of Astronomy from Cambridge University in 2011. His interests focus mainly on the cosmic peculiar velocity field study, CMB cosmology, SZ effect, gravitational lensing, 21cm measurement, general statistical method, dark energy and inflation tests.

### Abstract

Cosmologists' work is to measure the modes of fluctuations in the Universe. The total number of modes one can measure depend on the maximum space that one can observe, and the highest value of perturbation modes one can measure. In this talk, I will give a full picture of how this “total information” changes in the past and future time, and discuss how many number of modes cosmologists can be measured now, and in the future. In addition, I will present a few ongoing experiments, including cosmic microwave background, 21cm observations and the galaxy surveys, and discuss how these various experiments can help to map out the linear structure of the Universe.



*All are welcome! Tea, coffee, biscuits will be served at 2:15 P.M.*

You are welcome to nominate speakers to Weimin Yuan (wmy@nao.cas.cn), Mei Zhang (zhangmei@bao.ac.cn), Licai Deng (licai@bao.ac.cn), Xuelei Chen (xuelei@cosmology.bao.ac.cn), Shude Mao (smao@nao.cas.cn)