

2014 KIAA-PKU Astrophysics Forum

“TMT in China: Scientific and Technological Frontiers”

November 2-4, 2014

Kavli Institute for Astronomy and Astrophysics, Peking University

<http://kiaa.pku.edu.cn/astroforum14/>

Sunday, Nov 2, 2014

Registration 08:00 - 09:00

Session I: Opening Remarks Chair: Luis Ho

09:00 – 09:05 Luis Ho

09:05 – 09:10 Enge Wang, PKU President

09:10 – 09:20 Jiansheng Chen

09:20 – 09:30 Jun Yan

Session II: TMT and Synergy with Other Large Facilities Chair: Gang Zhao

09:30 – 10:10 Xiangqun Cui (I) *Chinese large optical telescopes: current states and future*

10:10 – 10:50 Shude Mao (I) *The Thirty Meter Telescope: A Golden Opportunity*

10:50 – 11:10 *Coffee Break*

11:10 – 11:50 Di Li (I) *The Status of Science Preparation for FAST and Possible Synergy Between FAST and TMT*

11:50 – 12:10 Yu Gao (I) *The Status and Operation of the JCMT by EAO and Synergy with the TMT*

12:10 – 12:30 Weimin Yuan *Synergy between TMT and Einstein Probe*

12:30 – 14:00 *Lunch Break*

Session III Cosmology & Galaxy Formation Chair: Xinmin Zhang

14:00 – 14:40 Liang Gao (I) *Tell the Nature of Dark Matter with Observations of Surroundings of High-z Galaxies*

14:40 – 15:20 Qi Guo (I) *Simulating the Local Group in the context of LCDM cosmology*

15:20 – 16:00 Xi Kang (I) *Confronting Cold Dark Matter Cosmology with Galaxy Observations*

16:00 – 16:30 *Coffee Break*

16:30 – 17:00 Hu Zhan (I) *A Large-scale Optical Survey under China Manned Space Program*

17:00 – 17:40 Gongbo Zhao (I) *Understanding the Cosmic Acceleration using TMT*

17:40 – 18:00 Emanuele Contini *Galaxy Population in Proto-Clusters*

18:00 - 18:30 Discussion Chair: Taotao Fang

Monday, Nov 3, 2014

Session IV: AGN & High-z Universe Chair: Jinming Bai

- 09:00 – 09:40 Jianmin Wang (I) *Broad-Line Regions in Active Galactic Nuclei*
09:40 – 10:20 Xuebing Wu (I) *Studying high-z Quasars with Optical/Near-infrared Spectroscopy*
10:20 – 11:00 Tinggui Wang (I) *Feeding and Feedback of AGNs*

11:00 - 11:30 *Coffee Break*

- 11:30 – 12:10 Taotao Fang (I) *The Circumgalactic Medium and the Intergalactic Medium*
12:10 – 12:30 Jicheng Cui (I) *高精度衍射光栅制造技术*

12:30 – 14:00 *Lunch Break*

Session IV: AGN & High-z Universe Chair: Tinggui Wang

- 14:00 – 14:40 Linhua Jiang (I) *TMT and High-Redshift Galaxies at the Epoch of Reionization*
14:40 – 15:00 Yongquan Xue (I) *Photometric Redshifts in the Hawaii-Hubble Deep Field-North*
15:00 – 15:20 Fei Yang *Overview of the Prototype Giant Steerable Science Mirror (GSSMP) of TMT*
15:20 – 15:40 Zhongwen Hu (I) *Experience of astronomical spectrographs construction in China and Cooperation activities on MOBIE from NIAOT*

15:40 – 16:10 *Coffee Break*

- 16:10 – 16:50 Yue Shen (I) *Highlights from the SDSS-RM Project and Prospects with TMT*
16:50 – 17:10 Huaidong Yang *TMT Instrumentation Preparation: Science Flow-Down*
17:10 – 17:30 Zhuoxi Huo *Space Variant Deconvolution Based on Adaptive Interpolation of Kernel Matrix and its Application in Object Reconstruction*

17:30 – 18:00 Discussion Chair: Yue Shen

18:30 – *Banquet at KIAA*

Tuesday, Nov 4, 2014

Session V: Planets & Stars Chair : Eric Peng

- 09:00 – 09:40 Jilin Zhou (I) *Formation of Planetary Architecture and Related Observations*
09:40 – 10:20 Xiaofeng Wang (I) *Time-Domain Sciences in the TMT Era*
10:20 – 10:40 Kai Wei (I) *TMT Laser Guide Star Facility Design Current Status*

10:40 – 11:10 *Coffee Break*

11:10 – 11:50 Feng Tian (I)

11:50 – 12:10 Yi Zheng (I)

12:10 – 12:30 Jiwei Xie

TMT for Solar System Science

NIAOT Preparations for TMT Segment Fabrication

*Using TMT to Characterize Transiting Planetary Systems
Detected by Kepler and TESS Planet*

12:30 – 14:00 *Lunch Break*

Session V: Planets & Stars Chair: Jilin Zhou

14:00 – 14:40 Gregory Herczeg (I)

14:40 – 15:20 Subo Dong (I)

15:20 – 15:40 Kai Zhang (I)

Star and Planet Formation with the TMT

New exoplanet windows opened up by TMT

Current states of TMT - IRIS and its image slicer

15:40 – 16:10 *Coffee Break*

16:10 – 16:50 Eric Peng (I)

16:50 – 17:10 Richard de Grijs

17:10 – 17:30 Haibo Yuan

Studying Fossil Stellar Populations With TMT

The Stellar Initial Mass Function in the Era of TMT

*A New Method for Color Calibration to a Few mag
Accuracy, the Recalibration of Stripe 82 and Implications
on Binary Studies*

17:30 – 18:00 Discussion Chair: Subo Dong

18:00 – 18:30 Closing Remarks Suijian Xue and Luis Ho

40-minute invited (I) talks are 30 min talk + 10 min questions.

20 minute invited (I) and contributed talks are 15 min talk + 5 min questions.

English is the preferred language for presentations, but Chinese is acceptable.