

# The 2nd International Symposium on Cosmology and Ali CMB Polarization Telescope

Saturday, 7 September 2019 - Monday, 9 September 2019

北京师范大学

## Scientific Programme

## Day-1: 7th Sept

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### Registration

08:30-08:45

### opening remarks

08:45-09:10

Xinmin Zhang et al.

### progress-1 chair: Bin Hu

\  
09:10-09:40 General review of AliCPT'' by Hong Li

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09:40-10:10 Current status of AliCPT'' by Congzhan Liu

### coffee break

10:10-10:30

### progress-2 chair: Xuelei Chen

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10:30-11:00 The AliCPT-1 cryostat receiver'' by Maria Salatino

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11:00-11:30 The observation control of AliCPT-1, including hardware, software, user interface. The data acquisition, including data stream, data buffering, data transmission, data center'' by Yongjie Zhang

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11:30-12:00 ``CMB and the origin of our Universe'' Yifu Cai

### lunch

12:00-13:30

## progress-3 chair: Yunsong Piao

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13:30-13:45 Foreground removal pipeline in AliCPT'' by Le Zhang  
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13:45-14:00The power of CMB-lensing: AliCPT X DESI and more...'' by Ji Yao  
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14:00-14:15 RECONSTRUCTING SIMULATED CMB POLARIZATION POWER SPECTRA WITH THE ANALYTICAL  
BLIND SEPARATION METHOD'' Larissa Santos  
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14:15-14:30Data analysis pipeline and noise simulation for AliCPT'' by Siyu Li

## panel discussion: experiment chair: Hong Li

14:30-15:00

## coffee break

15:00-15:20

## science-1 chair: Zuhui Fan

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15:20-15:35 Constructing unbiased estimator for CMB polarizations in the optimal way''  
by Wen Zhao  
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15:35-15:50The hemispherical power asymmetry after Planck'' by Shamik GHOSH  
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15:50-16:05 the cosmic infrared background'' by Bin Yue  
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16:05-16:20CMB lensing reconstruction in AliCPT'' by Bin Hu

## coffee break

16:20-16:40

## science-2 chair: Congfeng Qiao

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16:40-17:00 Implications for Discovery of Strong Radial Magnetic Field at the Galactic  
Center'' by Qiuhe Peng  
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17:00-17:20Searching for patchy reionization from the cosmic microwave background'' by  
Chang Feng  
\  
17:20-17:40 Testing Dark Matter Energy Injection in CMB Measurements'' by Yu Gao  
\\  
17:40-17:55Auto- and cross-correlation of the cosmic microwave background lensing and

infrared background measured by Planck and Herschel'' by Ye Cao

## Reception

18:30-21:00

## Day-2: 8th Sept

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### science-3 chair: Mingzhe Li

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09:00-09:30 Future cosmic microwave observations from space: a European perspective''  
Jacques Delabrouille

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09:30-10:00 Primordial Fluctuations and Rare Objects in the Universe'' Zhiqi Huang

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10:00-10:30 ``Testing significance of the large angular scale CMB anomalies'' by Pawel  
Bielewicz

### coffee break

10:30-10:50

### science-4 chair: Junqing Xia

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10:50-11:20 The Probe of Inflation and Cosmic Origins'' by Shaul Hanany

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11:20-11:50 New Directions in Non-Gaussianity'' by Martin Bucher

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11:50-12:20 ``Review of Planck inflation result'' Fabio Finelli

### lunch

12:20-14:00

### science-5 chair: Yu Yu

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14:00-14:30 CMB lensing and Minkowski Functionals'' Jan Hamann

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14:30-15:00 General solutions of the leakage in integral transforms and applications to  
the EB-leakage and detection of the cosmological gravitational wave background'' by Hao

Liu

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15:00-15:30 ``Galactic synchrotron emission with Gaussian random magnetic field  
realisation'' by Jiaxin Wang

## science-6 chair: Lixin Xu

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15:50-16:20 (remote talk)Analysis techniques for CMB B-mode experiments'' Ben Wandelt

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16:20-16:35Propagation of the gravitational waves in a cosmological background'' Xian  
Gao

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16:35-16:50 Deep learning the cosmic large scale structure `` Xiaodong Li

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16:50-17:05effective field theory of small  $r$ '' by Taotao Qiu

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17:05-17:20 ``Future constraints from the gravitational wave standard siren data'' by  
Minghui Du

## panel discussion: science

17:45-18:10

## summary remarks

18:10-18:20

## Day-3: 9th Sept

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## free discussion

09:00-18:00