Astronomy Colloquium

Prof. Zhongxu Zhai

(翟忠旭)

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Application of galaxy clustering at non-linear scale to the measurement of cosmology and galaxy properties

Time: 14:00-15:00, 20 September (Friday), Shanghai time

Venue： N600（TDLI）

Host: Gwenael Giacinti

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Meeting ID: 872523350

Abstract:

The spatial distribution of galaxies at non-linear scale plays a critical role in the study of both fundamental cosmology and galaxy formation physics. The characterization can connect the luminous objects and dark matter in the universe. With physical and empirical models combined with observational data, we are able to extract information covering a wide spectrum, from modified gravity to galaxy assemblies, from neutrino mass to structure growth. In this talk, I will introduce some of the recent research along this direction and future perspectives.

Biography:

Dr. Zhongxu Zhai obtained the PhD from New York University in 2018, and then did the first postdoc at Caltech/IPAC from 2018 to 2021, and a short second postdoc at the University of Waterloo from 2021 to 2022. He joined the Department of Astronomy, Shanghai Jiao Tong University as a faculty member in 2022/09. His research is in the field of cosmology and galaxy science, using methodologies from numerical simulation, statistical analysis, and observational data from galaxy surveys.