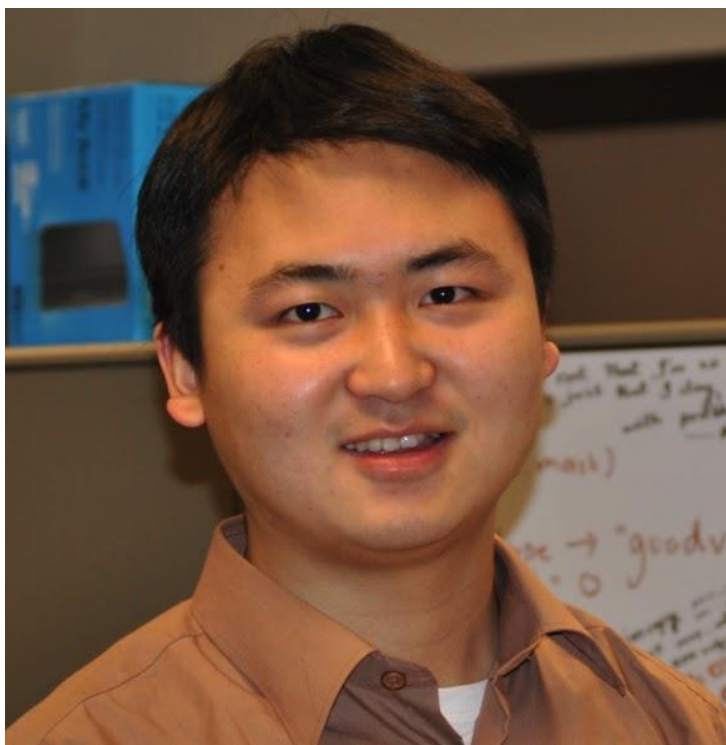


USTC Astronomy colloquium Series: 2018 Spring

Probing Cosmic Reionization with Lyman Alpha Galaxies

郑振亚 研究员 (Shanghai Astronomical Observatory)

2018/05/15, 4pm, the Observatory Hall



Reionization of hydrogen in the intergalactic medium of the early universe, known as cosmic reionization, is a landmark in the structure formation history of the whole universe. Thanks to the resonant scattering properties of Ly α photons by neutral hydrogen, the statistical analysis of Ly α emitting galaxies (LAEs) in that epoch provides one of the most powerful methods for the study of the cosmic reionization. In this talk, I'll present our recent results of using LAEs to probe the reionization epoch via the LAGER project — “Lyman Alpha Galaxies in the Epoch of Reionization”. This project, which exploits a custom-made narrowband filter at 9640 Ang dedicated to DECam for its uniquely large FOV and high QE in the near-infrared, is the largest narrowband survey project for $z \sim 7$ galaxies to date.

Dr. Zheng is a research professor at Shanghai Astronomical Observatory since Nov. 2016. His research interests include high-redshift galaxies, cosmic reionization, supermassive black hole binaries, and AGN variabilities. Dr. Zheng obtained his B.S. and Ph.D. from University of Science and Technology of China in 2006 and 2012, respectively. Before he joined SHAO, he worked at Arizona State University as a SESE Exploration Postdoctoral Fellow from Sep. 2012 to Oct. 2014, and at Pontificia Universidad Catolica de Chile as a CAS-CONICYT Postdoctoral Fellow from Oct. 2014 to Nov. 2016.