Astronomy Seminar

Dr. Ning Jiang

(USTC)

A Golden Decade of Optical Tidal Disruption Events: Open Questions, New Insights, and Future Prospects

Time: 15:00-16:00, 16 April (Tuesday) Shanghai time

Venue: N602（TDLI）

Host: Zhen Pan

Join Tencent Meeting: https://meeting.tencent.com/dm/4AR3pHCMzqrW

Meeting ID: 545741378

Abstract:

Optical surveys have dominated the discovery of tidal disruption events (TDEs), resulting not only in an increasing number and diversity of TDEs, but also in many unresolved open questions, such as the puzzle of the optical emission origin, the host galaxy preference, and the missing energy. In this talk, I will first introduce the current status of TDE study, especially those discovered by optical surveys. Then I will present our systematic search for TDEs using the novel dust infrared echoes, which have revealed a large sample of dusty TDE candidates missed by optical (and also X-ray) surveys. I will also present our recent progresses on the discovery of some new interesting optical TDEs or phenomenons. These studies offer some new insights into the understanding of TDEs. Finally, I will briefly introduce the 2.5 meter Wide Field Survey Telescopes and its prospects in TDE science.

Biography:

Dr. Ning Jiang is a research associate in the department of astronomy at University of Science and Technology of China (USTC). He received his Bachelor's and Doctor's degree in USTC in 2009 and 2015, respectively. His research interests have focused on various topics of supermassive black holes (SMBHs), including tidal disruption events (TDEs), intermediate-mass black holes, supermassive black hole binaries, environments of SMBHs from subparsec to halo scale. He also has broad interests in other transients and multi-messenger astronomy. He is currently leading the TDE science group of the WFST project.