Astronomy Seminar





Prof. Thomas Tan (谭柏轩) Sun Yat-Sen University Finding new compact binaries using photometry, and a possible LHAASO association with a young stellar object

Time: 10:00-11:00, 15 January (Wednesday), Shanghai time

Venue: N601 (TDLI)

Host: Fabo Feng (冯发波)

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Meeting ID: 431300491

Abstract:

This talk will include two parts. The first part concerns our on-going efforts in searching for new compact binaries. In recent years, planet-search satellites such as Transiting Exoplanet Survey Satellite (TESS) have opened an era of high-precision photometry of a large number of stars. I demonstrate that TESS and ZTF photometric data are very useful in identifying periodicities of known spider-like systems, by observing the orbital period-modulated flux variation from the stellar companion. We report a group of potential compact binaries. The second part concerns our on-going data analysis efforts using LHAASO data. I will highlight a recent discovery of a LHAASO source in the sky field of a young stellar object.

Biography:

教授,博士生导师。2002年以一级荣誉毕业于香港大学物理系,2004年在该校获硕士学位。2005年赴德国的国际马普研究所海德堡分所进修。2008年获得德国海德堡大学博士学位。2009年起先后在海德堡大学、台湾清华大学担任博士后研究员。2012年起在台湾清华大学任助理研究员。2014年被中山大学引进。从2005年开始参与海斯(H.E.S.S.)切伦科夫阵列团队,2010年起为费米亚洲联盟(Fermi Asian Network)创会核心成员,现为H.E.S.S., CTA, LHAASO, Einstein Probe等高能探测器的合作组成员,LHAASO合作组IB(intitutional board)中山大学代表。研究领域包括高能天体物理;研究伽玛射线双星、致密双星等天体,并伽玛射线暴等爆发源。