# Astronomy Colloquium

**Prof. Ruoyu Liu**

**(柳若愚)**

**Nanjing University**

**Origin of TeV pulsar halos and their potential as probes of interstellar magnetic fields**

**Time:** 15:00-16:00, 9 July (Tuesday), Shanghai time

**Venue：** N600（TDLI）

**Host:** Hao Zhou (周浩)

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**Meeting ID:** 865470286


**Abstract:**

Propagation of cosmic rays in the interstellar medium is subject to the properties of the interstellar magnetic field. On the other hand, thanks to the advanced performance of LHAASO, extended TeV gamma-ray sources such as pulsar halos may be used to diagnose the interstellar magnetic field. In this talk, I will introduce our studies on pulsar halos and discuss the potential application of pulsar halos as a probe of magnetic field.


**Biography:**

Ruoyu Liu obtained his doctor degree in 2015 from the University of Heidelberg. He has worked in Nanjing University as a research professor since 2019. His main research interest focuses on the origin of high-energy cosmic messengers such as cosmic rays, gamma-rays, and neutrinos, as well as their potential astrophysical sources including pulsar wind nebulae, supernova remnants, blazars, gamma-ray bursts and so on.