

You are welcome to nominate speakers to colloquium@nao.cas.cn. The video and slide of previous colloquia and more information can be found at <http://colloquium.bao.ac.cn/>.

国台学术报告 NAOC COLLOQUIUM

2014年 第37次 / Number 37 2014

Time: Wednesday 2:30PM, Sep. 17 Location: A601 NAOC

CSI: Type Ia Supernova Remnants in the LMC



Prof. You-Hua Chu (ASIAA)

Dr. Youhua Chu is the distinguished research fellow and director of Academia Sinica Institute of Astronomy and Astrophysics (ASIAA). She received her BS degree in Physics from National Taiwan University in 1975, and

PhD in Astronomy from the University of California at Berkeley in 1981. She then worked as postdoc researcher at University of Wisconsin, Lindheimer Fellow at Northwestern University, and as the faculty member at University of Illinois, Urbana-Champaign. She has been the astronomy department chair for 6 years, and retired in 2014. Her research areas include: multi-wavelength observations of interstellar medium, star formation and feedback (giant HII regions, superbubbles, supernova remnants, planetary nebulae), the Magellanic Clouds, and debris disks (planetary systems) around white dwarfs.

Abstract

Type Ia supernovae are standardizable candles for cosmological distances, yet the nature of their progenitors, whether single-degenerate or double-degenerate, is not ascertained. If a surviving companion is identified in a Type Ia supernova remnant (SNR), the single-degenerate origin can be affirmed. No surviving companions have been found in Type Ia SNRs in the Galaxy. I will introduce Type Ia SNRs in the Large Magellanic Cloud (LMC), summarize previous searches for surviving companions in two young remnants, and report our ongoing search in nine remnants using new Hubble Space Telescope images.



SNR 0509-67.5 - the youngest Type Ia SNR in the LMC Red – HST H α image, Blue – Chandra X-ray image

All are welcome! Tea, coffee, biscuits will be served at 2:15 P.M.