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# 国台学术报告 NAOC COLLOQUIUM

Time: **Wednesday 2:30 PM, Sep. 09**      Location: **A601 NAOC**

## The Astrophysics of Stellar Mass Compact Objects

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Dr. Ronald Taam is a distinguished research fellow at the Academia Sinica Institute of Astronomy and Astrophysics (ASIAA) in Taipei, Taiwan and emeritus professor in the Department of Physics and Astronomy at Northwestern University in Evanston, Illinois, USA. He holds a PhD in Astronomy from Columbia University and has held positions at the University of California at Santa Cruz and the University of California at Berkeley before joining Northwestern University in 1978. He has served as Chairman of the department and currently serves as the managing deputy director of ASIAA and the director of the Theoretical Institute for Advanced Research in Astrophysics (TIARA) within ASIAA. He is an elected Fellow of the American Physical Society.

Dr. Taam is a theoretical astrophysicist with interests in the formation and evolution of stars in isolation and in binaries, the nature of accretion onto stellar mass black holes in black hole X-ray binary systems and onto supermassive black holes in active galactic nuclei, and the high energy astrophysics of compact objects. The thrust of his research has been broadly directed to fundamental investigations of the evolutionary processes for compact star formation and evolution, and investigations of the variability of transient sources resulting from processes taking place either within an accretion flow or within the compact object itself.

**Abstract** Current developments in the astrophysics of stellar mass compact objects will be highlighted. Recent space based and ground based observations of X-ray point sources in our Galaxy and in external galaxies have led to a resurgence of interest in these objects. A brief overview of their observational properties will be introduced and our current physical understanding described. Many of these objects are transient, exhibiting time variations in both flux and spectra. By studying their behavior in both quiescence and in outburst, they can be used as cosmic laboratories to reveal the physics underlying their nature and state of evolution.

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