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# 国台学术报告NAOC COLLOQUIUM

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

## The Triggering and Fueling of Low-Luminosity AGNs

**Prof. Lei Hao (SHAO)**



Professor Lei Hao obtained her Ph.D from Princeton University in 2004. She then worked as a postdoctoral research associate at Cornell University and the University of Texas at Austin from 2004 to 2009. She joined Shanghai Astronomical Observatory as a CAS Bairen Professor in late 2009. Her main research interest is the evolution of galaxies and AGNs, which involves AGNs, starbursts, dwarf galaxies, and high-redshift Lyman-alpha emission-line galaxies. She is an expert on the multi-wavelength (especially optical and infrared) and statistical studies of galaxies and their black holes. She has published over 40 peer-reviewed papers that are cited for over 3000 times (including 400+ citations on her first-author papers). She is now leading the China Lijiang IFU (CHILI) project to install an IFU unit on the 2.4-m telescope in Yunnan of China.

### Abstract

It is well-established that galaxies and their central super-massive black holes co-evolve, which indicates that the growth of a black hole is somehow constrained by its host galaxy and vice versa. Thus the triggering and fueling processes of AGNs are essential to understand the details of the co-evolution. In this talk, I will focus on low-luminosity AGNs, and touch a few aspects of how they are triggered and fueled. I will start by showing intriguing cases where the AGNs might be at their infancies, then discuss how AGNs are triggered or fueled at scales ranging from cosmological large-scale structures to the very central parsecs near the black holes. In particular, I will talk about studies of AGN fueling with 2D spectroscopy. In the end, I will show how future surveys, such as HETDEX, can make significant advances in studies of low-luminosity AGNs at high redshift.



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