

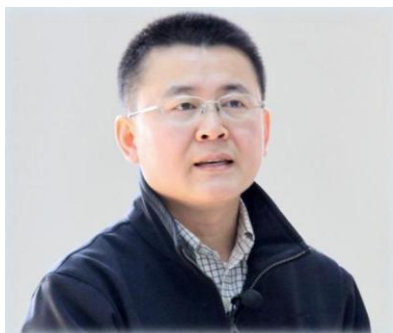
# 国台学术报告 NAOC COLLOQUIUM

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**TIME: Wednesday, 2:30 PM, Dec. 04 2013**    **LOCATION: A601 NAOC**

## Puzzling accretion onto a black hole in M101 ULX-1

**Prof. Jifeng Liu (NAOC)**

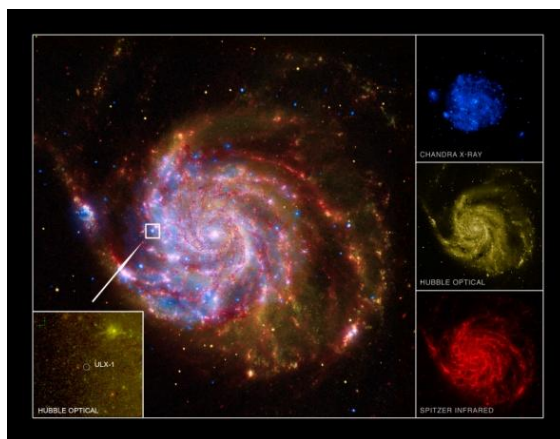


Dr. Jifeng Liu graduated from University of Michigan and went to Harvard-Smithsonian Center of Astrophysics as a postdoc. He was a Chandra fellow (renamed Einstein fellow now) between 2006 and 2009, and became an astrophysicist at Harvard afterward. Jifeng is now based in Beijing as an researcher at National Astronomical

Observatories of China, with research interests mainly in multi-wavelength observations of compact objects in the Milky Way and nearby galaxies.

### Abstract

Ultraluminous X-ray sources could be the long-sought intermediate mass black holes as necessary for current supermassive black hole formation theories; alternatively they could be stellar mass black holes somehow managing to radiate at near- or even super-Eddington luminosities. The key of ULX studies is to measure the black hole mass via dynamical means, which turns out to extremely difficult. Our dynamical mass measurement for M101 ULX-1 shows that it is a stellar mass black hole instead of an intermediate mass black hole. This fact makes it hard to understand the supersoft X-ray spectrum of M101 ULX-1.



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

You are welcome to nominate speakers to Weimin Yuan (wmy@nao.cas.cn), Mei Zhang (zhangmei@bao.ac.cn), Licai Deng (licai@bao.ac.cn), Xuelei Chen (xuelei@cosmology.bao.ac.cn), Shude Mao (smao@nao.cas.cn)