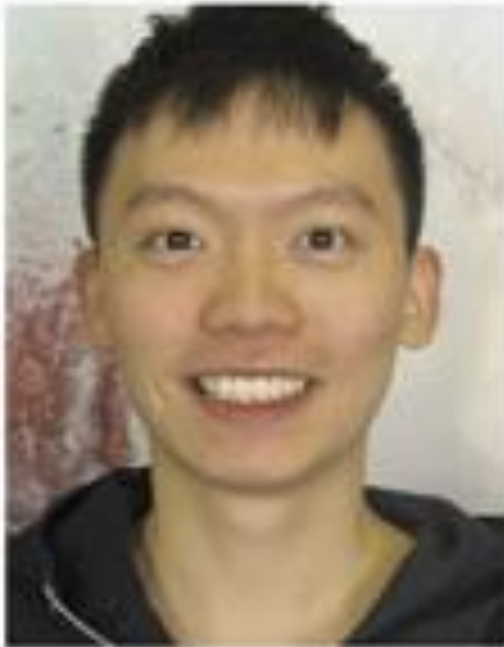


The 1.5 Ms Observing Campaign on IRAS 13224-3809: X-ray Spectral Analysis

姜嘉陈 (University of Cambridge, UK)

2017/11/16, 4pm, the Observatory Hall



I will present a detailed spectral analysis of the recent 1.5 Ms XMM-Newton observing campaign on the narrow line Seyfert 1 galaxy IRAS 13224-3809, taken simultaneously with 500 ks of NuSTAR data. The spectral variability is dominated by the power law continuum from a corona region within a few gravitational radii from the black hole. The disk reflection spectrum changes correspondingly. Additionally, blueshifted Ne X, Mg XII, Si XIV and S XVI absorption lines are identified in the stacked low-flux spectrum, confirming the presence of a highly ionized outflow with velocity up to $v = 0.263$ and 0.229 c.

Mr. Jiang Jia-Chen is now pursuing his PhD at the University of Cambridge, UK. He obtained his bachelor degree from Fudan University in 2016. He has published 10 papers in journals including JCAP, ApJ, PRD, PLB and MNRAS (2 under review), and is the leading author of 4 of them.