CIGALE: Fitting AGN/galaxy SEDs from X-ray to radio

Guang Yang[*1]

[1]Texas AM University – United States

Abstract

The Code Investigating GALaxy Emission (CIGALE) is an efficient open-source code for spectral energy distribution (SED) fitting of galaxies and active galactic nuclei (AGNs). However, the original release of CIGALE is not able to fit X-ray data, which often provides unique insights into active galactic nucleus (AGN) intrinsic power. We develop a new X-ray module for CIGALE, allowing it to fit X-ray data. We also improve the AGN fitting of CIGALE from UV-to-IR wavelengths by implementing clumpy torus and polar-dust extinction. In addition, we extend the AGN emission to radio wavelengths. These improvements make CIGALE a unique and powerful code that can model the full electromagnetic spectra from X-ray to radio.

---

[*]Speaker