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## Full Spectrum Modeling in AGN Galaxies Using Penalized Pixel-Fitting

*Friday 14 June 2024 15:30 (1h 40m)*

The goal is to create BPT diagrams for nearby Active Galactic Nuclei (AGN). These diagrams, named after Baldwin, Phillips, and Telervich, are a set of nebular emission line diagrams used to distinguish the ionization mechanism of nebular gas. Using these we can map the gas on a large scale within galaxies and identify regions where we have AGN feedback, and help us understand AGNs' role in the chemical and structural evolution of galaxies. Inspired by the methods in MUSE observations of a changing-look AGN I: The re-appearance of the broad emission lines (Raimundo et al., 2019), I want to replicate the results exclusively using the Penalized Pixel-Fitting (pPXF) method developed by Cappellari (2023).

### Field of study

Astrophysics

### Supervisor

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**Session Classification:** Poster session: Enjoy the posters!