Poster

PROPERTIES OF THE [OIII] LINES IN TWO SAMPLES OF RADIO-EMITTING NARROW-LINE SEYFERT 1 GALAXIES

M. Berton¹, L. Foschini², S. Ciroi¹, G. La Mura¹, V. Cracco¹ and P. Rafanelli¹

¹Department of Physics and Astronomy, Vicolo dell'Osservatorio 3, 35122 - Padova, Italy ²INAF - OA Brera, Via E. Bianchi 46, 23807 - Merate, Italy

E-mail: marco.berton.1@studenti.unipd.it, luigi.foschini@brera.inaf.it, stefano.ciroi@unipd.it, giovanni.lamura@unipd.it, valentina.cracco@unipd.it, piero.rafanelli@unipd.it

Flat-spectrum radio-loud Narrow-Line Sevfert 1 galaxies (NLS1) are a recently discovered class of γ -ray emitting Active Galactic Nuclei (AGN), that exhibit some blazar-like properties which are explained with the presence of a relativistic jet viewed at small angles. When blazars are observed at larger angles they appear as radiogalaxies, and we expect to observe an analogue parent population for beamed NLS1s. However, the number of known NLS1s with the jet viewed at large angles is not enough. Therefore we tried to understand the origin of this deficit. A previous study on black hole masses and accretion luminosities revealed that, when the inclination angle increases, a beamed source can appear as a steep-spectrum radio-loud NLS1. or possibly even as a disk-hosted radio-galaxy. It is also possible that, if the jet is young and has not developed radio-lobes yet, when observed at large angles it becomes invisible for present days observatories and it makes the galaxy appear as radio-quiet. Its presence could anyway be revealed by the asymmetries in the [O III] lines profiles, that in some cases are thought to be connected with the existence of jets. We are investigating two samples of radio-emitting NLS1s in order to find out the incidence of blue wings and blue outliers in radio-loud and radio-quiet sources. We are presenting here the preliminary results of our study, that seem to point out a different behaviour between the two samples.