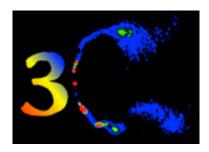
The 3C Extragalactic Radio Sky: Legacy of the Third Cambridge Catalogue



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## The MURALES survey: a MUse RAdio Loud Emission lines Snapshot

Thursday, 19 September 2019 09:50 (20 minutes)

We report the first results of the MURALES survey, a program of MUSE observations of 40 nearby (z<0.3) 3C radio galaxies. The MUSE data, combined with the unique multiband dataset available for these sources adds a key ingredient for our understanding of the radio-loud AGN feedback. We already fully modelled the MUSE data obtained for all the sources. The line emission images of unprecedented depth reveals the widespread presence of filamentary structures extending several tens of kpc in almost all the FRIIs. Only in a few cases we have evidence that the ionised gas is related to the expansion of the relativistic jet. In 3C317 and 3C277.3 we observe ionised gas around the X-ray cavities, a clear manifestation of the AGN feedback. In other cases the dense gas filaments are oriented perpendicularly to the radio jets, likely the remnants of the gas rich mergers which triggered the AGN. High velocity outflows of ionised gas, when revealed, remains confined in the inner region of the galaxy and it seems not to have a significative effect on the host galaxy.

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**Session Classification:** Extragalactic jets at all scales: from the central supermassive black hole to their interaction with the large scale environments