Nuclear Activity in Galaxies Across Cosmic Time
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Feedback from quasars: The prevalence and impact of radio jets

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Abstract. I will present our ongoing multi-wavelength study on the prevalence and impact of radio jets in a sample of $z < 0.2$ type 2 'obscured' quasars who's high bolometric luminosities make them ideal local analogues of distant, more common, quasars. Despite being classified as 'radio quiet' (log L[1.4GHz] = 23.3 - 24.4 W/Hz), our high spatial resolution (∼0.25") radio observations (VLA and eMERLIN) reveal jet like structures on 1–25kpc scales in ∼80% of the sample. Our integral field spectroscopy reveals jet-ISM interaction and outflows in all cases. Our work suggests that radio jets are an important feedback mechanism even during a typical 'quasar' phase. Using ALMA and APEX we are now investigating the impact of these jets and outflows on the molecular, star forming, gas; looking for signs of depletion and excitation. Preliminary results suggest a depleted molecular gas supply in these sources. I will present all of these results, focused on our pilot study of 10 targets and then introduce our on-going work on an expanded sample of 42 low-redshift quasars. Our latest results come from MUSE/AO and ALMA from which we are carefully characterising the properties of the ionised and molecular outflows at sub-kpc resolution.

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