NOT - a telescope for the future



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How common are outflows in low luminosity AGNs?

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Outflows play a major role in the evolution of galaxies and are said to be ubiquitous within the Active Galactic Nuclei (AGNs) population. However, we are far from having a complete picture of their properties, specially considering their impact on the evolution of Low-Ionisation Nuclear Emission-line Regions (LINERs). Although resolved kinematic information has proven to be crucial for the fully characterisation of these phenomena, imaging techniques can be really useful for the systematic search of outflow candidates. We have obtained narrow-band optical H α images with ALFOSC/NOT and retrieved soft-X ray and narrow-band Halpha images from Chandra and HST archives, respectively, for a total of 70 LINERs. We classified the ionised gas morphologies based on the extension and overall shape of the Halpha emission. We find that the soft X-ray and ionised gas emission coincide in the great majority of LINERs (60%), as previously seen for Seyferts (Bianchi et al. 2006), suggesting a common origin for both emissions. Our results show that approximately one third of the targets present extended, filamentary emission with a distinguishable bubble-shaped morphology. When combining NOT imaging data and spectroscopic data from

the current literature we find that outflows are present in 48% of the nearby LINERs.

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