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Invited Lecture

BINARITY IN AGN AND MICROQUASARS

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There are many similarities between micro-quasars and active galactic nuclei (AGN). Both populations show strong emission in all parts of the spectrum, various kinds of activities, outflows, jets and flare-like behaviour. Since all known micro-quasars are found in binary systems, there is an open question whether binarity can produce similar characteristics and behaviour of some AGN.

Poster

SEARCHING FOR A BBH SIGNATURE IN QUASAR SPECTRA: A 4DE1 PERSPECTIVE

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The search for evidence of binary (or multiple) black holes in quasars has become a hot topic. There is a general expectation that quasars grow by accretion and merging, so multiple BH are expected unless an newly arrived BH is quickly eaten by its host. We search for BBH in the context of the 4D Eigenvector formalism which has identified two quasar populations A and B. We test whether variability patterns may support the presence of more than one BH in Population B quasars sources which represent almost 50BH may be associated with all or many of the unusual properties of these sources (very-broad multicomponent Balmer line profiles, weak FeII emission, absences of soft X-ray excess/CIV blueshift, flux variability and frequent radio-loudness).