

*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 a 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).