

## Invited Speaker

**Name:** Sonia Antón

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**Title:** Chasing binary and displaced SMBH systems

**Abstract:** According to hierarchical assembly models, massive galaxies and their associated supermassive black holes (SMBH) are constructed by the merging of smaller galaxies, each with its own SMBH. In this scenario, there will be periods that the systems are formed by pairs of SMBH, and eventually displaced SMBH. The latter happens when there is a merger of the initial SMBHs, the final SMBH being kicked from the initial position due to the emission of gravitational waves. However, the number of known displaced SMBH or binary SMBH systems is surprisingly small, with less than 20 pinpointed systems in the kpc/pc separation scale, and that triggers the question of why there is such discrepancy. Maybe the scarcity of the systems is due to the limitations of sensitivity and resolution of the current searches. We propose to explore different search methods, taking advantage of the new window of parameter space offered by recent surveys, that go deeper in flux and astrometry accuracy.