

## **NUCLEAR ACTIVITY AND STAR FORMATION IN GALAXIES**

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The existence of correlations among nuclear properties of galaxies, such as the mass of their central black holes, and larger scale features, like the bulge mass and luminosity, represent a fundamental constraint on galaxy evolution. Although the actual reasons for these relations have not yet been identified, it is widely believed that they could stem from a connection among the processes that lead to black hole growth and stellar mass assembly. The problem of understanding how the processes of nuclear activity and star formation can affect each other became known to the literature as the Starburst-AGN connection. Despite years of investigation, the physical mechanisms which lie at the basis of this relation are known only in part. In this communication, we analyze the problem of star formation and nuclear activity in a large sample of galaxies. We study the relations among the properties of the nuclear environments and of their host galaxies. We find that the mass of the stellar component within the galaxies of our sample is a critical parameter, that we have to consider in an evolutionary sequence, which provides further insight in the connection among AGN and star formation processes.