Special Issue

The Symbiosis between Radio Source and Galaxy Evolution

Message from the Guest Editors

Dear colleagues, It has been suggested that powerful AGN-driven outflows directly affect the evolution of galaxies, heating the galaxy's cold gas and/or expelling it from the central bulge regions. This, in turn, influences galaxies' star formation histories, mediating the relationship between host galaxy and central supermassive black hole and shaping the high luminosity end of the galaxy luminosity function. This points to a direct link between nuclear activity (which occurs when the black hole is growing via accretion) and star formation and matter accretion (which occurs when the galaxy is growing). The growth of the central engine and the evolution of the galaxy are linked in a symbiotic relationship impacting their co-evolution. While AGN feedback is now routinely incorporated into hydrodynamical simulations of galaxy evolution, major uncertainties remain. We are yet to understand in detail how AGN interact with the forming and evolving host galaxies, and how the host galaxy and its evolution impacts the central black hole.

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Message from the Editorial Board

Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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