Special Issue

Multi-Phase Fueling and Feedback Processes in Jetted AGN

Message from the Guest Editors

Relativistic radio-emitting jets associated with active galactic nuclei (AGNs) likely play a crucial role in the evolution of galaxies. By transferring a fraction of their kinetic energy to the surrounding medium (the so-called "kinetic-mode" AGN feedback), radio jets can both quench (negative feedback) and promote (positive feedback) star formation, thus regulating the growth of both central supermassive black holes (SMBHs) and their host galaxies.
Recent observations also suggest that jetted AGNs may be self-regulated by a feeding and feedback loop, in which the matter that fuels the SMBH and triggers the jet activity gets regularly heated by these latter and stops being accreted, setting up a cycle that is fast compared to the evolutionary timescales of the host galaxies. All this provides clear evidence of a deep connection between the large-scale environment, fueling/feedback processes of jetted AGNs, and their host galaxy evolution, although the complexity of these phenomena still leave many open questions.

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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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