

# Clues on SMBH growth and galaxy quenching from a large scale perspective

*Wednesday, 31 July 2024 14:30 (30 minutes)*

Galaxy evolution models typically rely on SMBH feedback to quench massive galaxies. Therefore, accurately modeling the growth of these objects in our simulations is essential. In this talk, I will present an analysis of the star formation in local galaxies across different cosmic web environments, namely voids, walls, filaments, and nodes.

Interpreted using a semi-analytic model, the analysis shows that quenching occurs similarly in massive galaxies regardless of the environment. Consequently, the growth of SMBHs, responsible for galaxy quenching, must be environment-independent. These results serve as a critical test for our galaxy evolution simulations.

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