

Poster: Massive Stars and the Origin of Supermassive Black Holes

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I summarize theories for the formation of supermassive black holes (SMBHs) and focus in particular on the possible connection to massive star formation in the distant, metal-free universe. In certain environments of pristine minihalos of high dark matter density, star formation may lead to the birth of supermassive, i.e., $\sim 100,000$ solar mass, stars that are the direct progenitors of SMBHs. I discuss how such models may be tested observationally, including with JWST, and compare and contrast with how massive stars form locally.

Galactic Scale