

The Rise and Fall of the Power of Galaxy Nuclei

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Abstract: Galaxies, just like the one we live in, the Milky Way, are collections of stars and gas. They often show huge amounts of energy coming from their central regions, and we believe this is caused by matter falling onto a super-massive black hole. Famous examples are powerful quasars, which are mostly seen at large look-back times. There is increasing evidence that this same phenomenon may be happening at a low level in a large fraction of local galaxies, and that the quiescent nearby galaxy nuclei are probably relics of ancient quasars. I will present ground- and space-based observations that bear to our understanding of the central engine of these cosmic objects from very large cosmological distances and from nearby, and discuss the implications for the formation and evolution of galaxies in universe.