

Measuring Black Hole Masses in X-ray Bright Galactic Nuclei

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X-ray and radio emission from X-ray bright galactic nuclei such as LINERS and low luminosity Seyferts is likely to arise from hot two-temperature, advection-dominated accretion flows. The observed hard X-ray and high frequency radio luminosities could be used to estimate the central supermassive black hole masses. These new estimates depend on relatively few parameters and are independent of other existing estimates. Black hole masses in a few galactic nuclei, which are derived using dynamical methods, are confirmed. Large scale and small scale jet activities appear to be an emission process additional to the accretion flow itself for which the critically rotating black hole spin is likely to be responsible.