

Measuring spin of accreting supermassive black holes in AGN

Measuring the spin of a black hole is important for two reasons. Firstly, it is key for our understanding of black hole physics. Secondly, it contains an imprint of the black hole's growth history over cosmic time. Recent results from continuum fitting studies (Done et al. 2013), to determine the spin of supermassive black holes (SMBHs) in active galactic nuclei (AGN), are presented. These results contradict the previously established method of applying analysis of the iron emission line profile, which often predicts very high spins. As an example, Fabian et al. (2009) adopted this latter method in their study of 1H 0707–495. Here we discuss the advantages and disadvantages of these two studies, and the wider implications for black hole growth.

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