Revisiting narrow-line Seyfert 1 galaxies and their place in the Universe



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The mass of NLS1 black holes: reconciling accretion disk and virial estimates

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We present a new catalog of spectral properties for a sample of 55 radio-loud NLS1 observed at optical and UV wavelengths, providing emission line luminosities and widths, continuum luminosities and slopes.

We used this catalog to estimate the black hole masses of the sample by means of the accretion disk modeling technique. The obtained masses are systematically larger than those derived with the virial method by a factor of ~5, and the Eddington ratios are correspondingly lower.

Finally, we discuss a possible way to reduce the discrepancies, and reconcile the estimates provided by the two techniques, exploiting an alternative accretion disc model that reliably describes the emission of a highly accreting, radiatively inefficient disc.

Motivation

Grant

no

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