

Marzena Sniegowska - CL AGN - the spectral (r)evolution

Friday, 14 June 2019 11:20 (20 minutes)

I will present a detailed analysis of SDSS J123359.12+084211.5 –source classified by MacLeod et al. (2018) as a CL AGN. However, this object is an exception in CL AGN population, because of large Eddington ratio and strong changes in FeII emission.

The changes in the FeII strength affects the position of the object in the optical FWHM Hbeta vs. RFe plane, where RFe is a ratio of EW FeII and EW Hbeta.

A broad component of Hbeta line changes dramatically as well, which disrupts known correlations in the proposed Quasar Main Sequence.

Moreover, I have found more objects with similar spectral evolution, which may indicate that CL AGN are not a homogenous sample.

Lastly, we propose a simple explanation of the mechanism of the Changing Look phenomenon in AGN. This model gives quantitative predictions and works well for multiple outbursts of NGC 1566.

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