

ASTROPHYSICS SEMINAR

Friday, 4 October 2013 at 11:00

The narrow iron $K\alpha$ line as a probe of neutral material in Active Galactic Nuclei

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Abstract. The narrow iron $K\alpha$ line is the most distinctive feature in the X-ray spectra of Active Galactic Nuclei, and is possibly the most important tracer of neutral matter surrounding the supermassive black hole. One of the most interesting characteristics of the narrow Fe $K\alpha$ line is the decrease of its equivalent width with the X-ray luminosity, the so-called X-ray Baldwin effect. This trend has been found by many studies of type-I AGN, and very recently also in type-II AGN (Ricci et al. 2013c).

In my talk I will review the main characteristics of the Fe $K\alpha$ line, and present the results of our recent works aimed at explaining the X-ray Baldwin effect using iron-line emitting physical torus models (Ricci et al. 2013a,b), and at understanding the origin of the Fe $K\alpha$ line (Ricci et al. 2013c,d).

Additional Information

The seminars are given in the ISDC "Pavillon" building
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