XMM-Newton AGN observations: Iron lines, accretion disks and molecular tori

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[Contributed talk, 15min.]

Abstract

We present XMM-Newton observations of an AGN sample covering a wide range in luminosity and spectral type. Both broad and narrow iron Kα line components are frequently seen whose relative strengths vary among the sample. The broad iron lines can be highly ionised, with the degree of ionisation correlating with luminosity and/or accretion rate. The narrow-lines appear ubiquitous in low/medium luminosity AGN but are not detected in high luminosity QSOs. In the context of type-1/type-2 unified schemes, this correlation suggests molecular tori are less prominent in higher luminosity AGN. The observed continuum spectrum is also complex, frequently including strong soft X-ray emission in excess of an extrapolated high-energy 'powerlaw' component. These high-quality XMM-Newton data provide a powerful test of accretion disk models.

CATEGORY: ACTIVE GALAXIES AND QUASARS