

Estimating coronal parameters using MoCA

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The primary emission in Active Galactic Nuclei (AGN) is widely believed to be due to Comptonization of the thermal radiation from the accretion disk in a “corona” of hot electrons. The resulting spectra can, in the first approximation, be modelled with a cut-off power law.

Taking advantage of MoCA, a Monte Carlo code calculating spectral and polarization properties of the coronal emission, we computed Comptonization spectra for different parameters of the hot corona, comparing them with cut-off power laws. Plots to convert phenomenological parameters (cut-off energy and photon index) into physical ones (temperature and optical depth) will be presented and discussed.

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