

A bright ultraluminous X-ray source in NGC 5055

NGC 5055 X-1 is the brightest ultraluminous X-ray (ULX) source with luminosity 2.3×10^{40} erg/sec, located in the outskirts of the spiral galaxy NGC 5055. We present the first, detailed X-ray spectral analysis of this source. We fit the data with the phenomenological model composed of multi-color disk plus powerlaw and thermal Comptonization model. We found that the disk temperature radial profile has an index of 0.5 which rules out the standard thin disk model. The fitting of the 0.3-10 keV continuum indicates that the source is in the ultraluminous soft state. In all spectral fitting models, the source follows inverse luminosity-temperature relation, which indicates that the emission from the source is geometrically beamed due to optically thick wind outflow.

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