

XIV SERBIAN-BULGARIAN ASTRONOMICAL CONFERENCE

23 – 27 September, 2024, Vrnjačka Banja, Serbia

Book of Abstracts, eds. M.S. Dimitrijević, E. Semkov, Z. Simić, G. Damjanović, M. Dechev

<http://doi.org/10.69646/14sbac38a>

**X-RAY HARDNESS RATIO INFLUENCE ON THE MID-INFRARED
PARAMETERS OF AGNS**

MAŠA LAKIĆEVIĆ¹ , JELENA KOVAČEVIĆ-DOJČINOVIC¹ , LUKA Č. POPOVIĆ^{1,2} 

¹*Astronomical observatory, Volgina 7, 11000 Belgrade, Serbia*

²*Faculty of Mathematics, University of Belgrade, Studentski Trg 16, 11000
Belgrade, Serbia*

E-mail: mlakicevic@aob.rs

We use the resulting parameters of the two different model decompositions of mid-infrared (MIR) Spitzer IRS spectra of 1) extragalactic sources – galaxies and 2) active galactic nuclei (AGN). These resulting parameters are spectral components such as the AGN, PAH, H II, stellar contribution components, spectral index, silicate contribution, etc. It is found that some of these parameters correlate with X-ray hardness ratios (especially HR1). This reveals the insight in the energy bands of X-ray radiation that influences the MIR parameters and it can point to the AGN sources that are more obscured. HR1 correlations indicate the high attenuation of soft X-ray radiation by the dust.