NGC6418

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Abstract

NGC6418 is a Seyfert I Active Galactic Nucleus (AGN) that has exhibited qualities of a rare "changing-look" galaxy. Infrared and optical observations in the B and V optical bands have demonstrated that 11ijm flux variations lag behind the optical continuum with large variations in intrinsic luminosity. This behavior could be consistent with dust obscuration from a clumpy torus or a dusty cloud traversing the line of sight. The nature of this obscurations can be further quantified through analysis of the x-ray column density, which will provide insight into the Spectral shape and x-ray luminosity. Recent observational data from the X-ray Multi-mirror Mission (XMM) Newton telescope will be reduced and digested through open-source analysis software to develop further conclusions on NGC6418.