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Extreme variability in galactic nuclei detected with eROSITA

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The eROSITA all-sky X-ray survey has provided the basis for a large-scale search for extreme X-ray variability in extragalactic objects associated with accretion changes in AGN. We have combined the survey dataset with a multi-wavelength follow-up campaign of the most variable objects. The follow-up observations include optical spectroscopy and X-ray and UV observations. This presentation will cover the results of our search for extremely variable AGN based on at least four epochs of available eROSITA data. Our sample consists of ~2200 vetted extragalactic sources with significant X-ray changes. As part of our follow-up, we have collected optical spectroscopic follow-up on ~350 objects, including repeat spectroscopy for 40% of these. I will introduce our sample selection criteria, statistics on the detected X-ray variability, and the observed correlation with optical 'changing-look' behaviour. I will also briefly summarise some of the most interesting individual sources. Finally, I will discuss our results in the context of the link between extreme X-ray and optical variability and the time scales involved in large-scale accretion changes around SMBHs.

Primary author(s) : Dr. HOMAN, David (Leibniz-Institut für Astrophysik Potsdam)

Co-author(s) : Dr. KRUMPE, Mirko (Leibniz-Institut für Astrophysik Potsdam); Dr. MARKOWITZ, Alex (Nicolaus Copernicus Astronomical Center); Mr. SAHA, Tathagata (Nicolaus Copernicus Astronomical Center); KRISHNAN, Saikruba (The Inter-University Centre for Astronomy and Astrophysics (IUCAA)); Prof. WINKLER, Hartmut (University of Johannesburg); Dr. BUCKLEY, David (South African Astronomical Observatory); Prof. WILMS, Joern (Dr. Karl Remeis Observatory & FAU Erlangen-Nürnberg); Mr. SCHRAMM, Malte (Saitama University)

Presenter(s) : Dr. HOMAN, David (Leibniz-Institut für Astrophysik Potsdam)

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