



X-RAY ASTRONOMY 2019

Current Challenges and New Frontiers in the Next Decade

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Classifying eROSITA's Variable Source Population

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eROSITA on-board the SRG satellite will perform the next large X-ray all-sky survey. With its 30-fold increased sensitivity relative to its predecessor ROSAT and its multi-visit, multi-cadence survey strategy, eROSITA will provide a new and deeper look into X-ray time domain astrophysics. To better handle the vast number of sources eROSITA is expected to detect, and assist with planning multi-wavelength follow-up, we are developing a pipeline for automated classification of the transient and variable source populations. We present an overview of this pipeline, and discuss the challenges of developing machine learning algorithms for classification of eROSITA's variable sources

Topic

Multi-messenger and transient astronomy

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