

Abstract Submitted
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Systems Overview of the Micro-X Sounding Rocket¹ ANTONIA HUBBARD, Northwestern University, MICRO-X COLLABORATION — The Micro-X High Resolution Microcalorimeter X-Ray Imaging Rocket is a sounding rocket mission that will observe Supernova Remnants and search for keV-scale sterile neutrino dark matter. Micro-X will combine the excellent energy resolution of Transition Edge Sensor microcalorimeters with the imaging capabilities of a conical imaging mirror to map extended and point X-ray sources with an unprecedented combination of energy and spatial resolution. The payload has been designed to operate in the challenging conditions of a sounding rocket flight and to achieve sensitive results, in a single five-minute exposure, for each of these science goals. The first flight of the payload will be in July 2018. We present the design and status of the payload with special emphasis on the particular engineering challenges of flying such detectors on a sounding rocket.

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