

Abstract Submitted
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Measuring the Cosmic Particle Radiation from electrons to actinides - HNX/TIGERISS JOHN MITCHELL, NASA Goddard Space Flight Center — The Heavy Nuclei eXplorer (HNX) mission will measure the abundances of nuclei from Carbon ($Z=6$) to Curium ($Z=96$) in the cosmic radiation with the resolution to identify the atomic number of each detected nucleus. HNX will measure a significant number of actinides. HNX utilizes two high-precision instruments, the Extremely-heavy Cosmic-ray Composition Observer (ECCO) and the Cosmic-Ray Trans-Iron Galactic Element Recorder (CosmicTIGER), located in a SpaceX DragonLab capsule orbiting the Earth. This talk will discuss the motivating science, the HNX mission, the design and performance of the HNX instruments, and another new instrument, TIGERISS (Trans-Iron Galactic Element Recorder on the ISS), that will be proposed as an intermediate between SuperTIGER and HNX.

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