

# The Trans-Iron Galactic Element Recorder for the International Space Station (TIGERISS)

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- Ultra-Heavy Galactic Cosmic Ray (UHGCR) detector to be proposed to the NASA Astrophysics Pioneers program capable of measuring the abundance relative to  $^{26}\text{Fe}$  of every element from  $^5\text{B}$  to  $^{82}\text{Pb}$ .
- LDB TIGER and SuperTIGER balloon instruments and the Heavy-Nuclei Explorer SMEX Proposal CosmicTIGER design heritage.
- Superior charge resolution of silicon strip detectors demonstrated at CERN.
- Geometry factor from 1.1 to 1.7  $\text{m}^2 \text{sr}$  depending on ISS attachment point.
- 1-year TIGERISS observations statistics comparable to SuperTIGER.
- Measure UHGCR nuclei resulting from neutron-capture nucleosynthesis in heavy stars, supernovae, and binary neutron-star mergers and will probe the relative contribution of r-process elements to the cosmic rays.

