## ECCO: TH/U/PU/CM DATING OF GALACTIC COSMIC RAY NUCLEI

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The ECCO instrument is one of two instruments which comprise the HNX
mission. The principal goal of ECCO (the Extremely-heavy Cosmic-ray
Composition
Observer) is to measure the age of galactic cosmic ray nuclei using
the actinides (Th, U, Pu, Cm) as clocks. As a bonus, ECCO will search
with unprecedented sensitivity for long-lived elements in the superheavy
island of stability. ECCO is an enormous array (23 $m^2$) of BP-1 glass track-etch detectors, and is based on the successful
flight heritage of the Trek detector which was deployed externally on
Mir. We present a description of the instrument, estimates of
expected performance, and recent calibrations which demonstrate that
the actinides can be resolved from each other with good charge resolution.