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SuperTIGER Abundances of Galactic Cosmic-Rays for the Charge Interval Z=41-56[1] NATHAN WALSH, WALTER BINNS, MARTIN ISRAEL, RYAN MURPHY, BRIAN RAUCH, JOHN WARD, Washington University, TERRI BRANDT, JASON LINK, JOHN MITCHELL, THOMAS HAMS, KENICHI SAKAI, MAKOTO SASAKI, NASA Goddard Space Flight Center, ALLAN LABRADOR, RICHARD MEWALDT, EDWARD STONE, California Institute of Technology, MARK WIEDENBECK, Jet Propulsion Laboratory, CECIL WADDINGTON, University of Minnesota, SUPERTIGER COLLABORATION — The SuperTIGER (Trans-Iron Galactic Element Recorder) instrument was launched from Williams Field, Antarctica on December 8, 2012 and flew for 55 days on a long-duration balloon at a mean altitude of 125,000 feet. SuperTIGER measured the relative abundances of Galactic cosmic-ray nuclei with high statistical precision and well resolved individual element peaks in the charge range Z=10-40. SuperTIGER also made exploratory measurements of the relative abundances up to Z=56. Although the statistics are low for charges greater than Z=40, we will show how the relative abundances of charges Z=40-56 compare to those reported by HEAO3-HNE. The charge range Z=40-60 is of particular interest because these elements are formed both in supernova explosions and in binary neutron star mergers. A well resolved relative abundance measurement of these elements can show us how much these astrophysical events contribute to the composition of the Galactic cosmic-rays.

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Nathan Walsh
Washington Univ

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