

Wednesday, March 21, 2018
IRON CORES AND MORE
3:00 p.m. Waterway Ballroom 5

[W454]

Chairs: Cari Corrigan
 Rhiannon Mayne

- 3:00 p.m. Chabot N. L. *
[*Composition of Metallic Cores in the Early Solar System*](#) [#1532]
 New trace element partitioning results are used to determine the variability of the bulk composition of metallic cores in the early solar system.
- 3:15 p.m. Jordan M. K. * Young E. D.
[*Iron Isotope Constraints on Planetesimal Core Formation in the Early Solar System*](#) [#2853]
 We determine the equilibrium Fe isotope fractionation between metal and silicate in differentiated meteorites and use the results to understand core formation.
- 3:30 p.m. Rubin A. E. *
[*Differences in Chemical, Physical, and Collective Properties Between Carbonaceous and Non-Carbonaceous Magmatic Iron Meteorites*](#) [#1034]
 Outer-solar-system carbonaceous irons have higher refractory siderophiles (inherited from CAIs), longer CRE ages, and fewer members than non-carbonaceous irons.
- 3:45 p.m. Corrigan C. M. * McCoy T. J.
[*Early Oxidation and Late Reduction in High-Ni Irons*](#) [#2527]
 We explore the relationships between IVB (and other high-Ni irons) and the Milton-South Byron trio, as well as formation conditions for these meteorites.
- 4:00 p.m. Young E. D. * Jordan M. K. Tang H. Shahar A.
[*Stable Isotopic Fractionation During Formation of the Earliest Planetesimals*](#) [#2551]
 Fe isotopes show that the iron meteorites are the last vestiges of some of the earliest-formed planetesimals that carry the isotopic signatures of evaporation.
- 4:15 p.m. Humayun M. * Boesenberg J. S. van Niekirk D.
[*Composition of the IIF Irons and Their Relationship to the Zinder Pallasite*](#) [#1461]
 New data chemically links the IIF irons and metal of the pyroxene pallasite Zinder, which deepens the provenance enigma between Mo and O isotopes.
- 4:30 p.m. Sanborn M. E. * Yin Q.-Z. Ziegler K.
[*Genealogy of IVA Iron and Pallasite Meteorites: The Implications for Planetesimal Differentiation Processes in the Early Solar System*](#) [#1780]
 Identity and bulk composition of parent bodies of most iron meteorites and pallasites are unknown. Here we use ^{54}Cr to unravel the genealogy of these meteorites.