

Friday, March 22, 2013
STARDUST AND IDPS
1:30 p.m. Waterway Ballroom 5

[F553]

Chairs: Don Brownlee
Natalie Starkey

- 1:30 p.m. Brownlee D. E. * Joswiak D. Matrajt G.
[*The Nature and Relationship of Coarse and the Mysterious Fine Materials Collected from Comet Wild 2*](#) [#2564]
The fine component of materials collected from Comet Wild 2 appears differs from the coarse component and appears to have a different solar nebula origin.
- 1:45 p.m. Kearsley A. T. Salge T. Wozniakiewicz P. J. * Price M. C. Terborg R. et al.
[*Preservation and Modification of Fine-Grained Cometary Dust Captured by Stardust: The Fate of Aggregate Components in Hypervelocity Impacts on Aluminium Foil*](#) [#1910]
Diverse mixtures of melts and mineral fragments are found by using a new X-ray detector to map craters made by impact of aggregates on Stardust aluminium foil.
- 2:00 p.m. Floss C. * Stadermann F. J. Kearsley A. T. Burchell M. J. Ong W. J.
[*Determination of Presolar Grain Abundances in Samples from Comet 81P/Wild 2*](#) [#1133]
We report the results of presolar grain searches in laboratory test shots of Acfer 094 and use them to calibrate absolute presolar grain abundances in Wild 2.
- 2:15 p.m. Gainsforth Z. * McLeod A. S. Butterworth A. L. Dominguez G. Basov D. et al.
[*Caligula, a Stardust Sulfide-Silicate Assemblage Viewed Through SEM, NanoFTIR, and STXM*](#) [#2332]
NanoFTIR is a new technique to probe infrared modes below the diffraction limit of FTIR. We apply it here to examine an amorphous Stardust silicate.
- 2:30 p.m. Palma R. L. Pepin R. O. * Schlutter D. J. Stodolna J. Westphal A. J. et al.
[*Q-Gases in an Unusual IDP: A Noble Gas Link to Carriers in Stardust Track 41*](#) [#1694]
Helium- and neon-isotope ratios in a large amorphous particle extracted from a cluster IDP closely match compositions measured in the meteoritic Q-phase.
- 2:45 p.m. Starkey N. A. * Franchi I. A.
[*Piecing Together the History of the Earliest Silicate and Organic Reservoirs in the Solar System*](#) [#1925]
Early solar system silicate and organic reservoirs are investigated with O, C, N, and H isotopes in a large set of IDPs to reveal intricately linked histories.