

Thursday, July 27, 2017
METEORITE FALLS/FINDS
3:00 p.m. Sweeney B

*This session reports studies of the observation, recovery,
and characterization of meteorite falls and finds.*

Chairs: Gretchen Benedix

Hasnaa Chennaoui Aoudjehane

- 3:00 p.m. Caplan C. E. * Huss G. R. Ishii H. A. Bradley J. P. Schmitz B. Nagashima K.
[Inclusions in Extraterrestrial Chrome-Spinel from Jurassic Sediments](#) [#6165]
 We studied inclusions in extraterrestrial chrome-spinel from Jurassic sediments to classify their parent meteorite type. With FIB-TEM, we found a complex alteration rim of iron oxide and silica that suggests terrestrial aqueous alteration origins.
- 3:15 p.m. Artemieva N. * Shuvalov V. V. Svetsov V. V.
[Airbursts: We Will Shock You!](#) [#6041]
 We model ground effects produced by airbursts for a wide range of impact scenarios and suggest simple interpolations which may be used to predict impact hazard.
- 3:30 p.m. Hildebrand A. R. * Hanton L. T. J. Nowell R. D.
[A Tale of Two Low-Strength \(But Probably Meteorite-Dropping\) Fireballs: British Columbia, Canada, December 20, 2014 and Utah, U.S.A., November 18, 2009](#) [#6392]
 Two recent fireballs apparently dropped meteorites although fireball characteristics indicated that the entering rocks were weak lithologies.
- 3:45 p.m. Fries M. * Laird C. Hankey M. Fries J. Matson R. Reddy V.
[Estimation of Meteorite Fall Mass and Other Properties from Weather Radar Data](#) [#6251]
 They fall in the dark / We have wondered how they break / Now we get to watch.
- 4:00 p.m. Gritsevich M. * Lytinen E. Hankey M. Meier M. M. M. Matson R. Fries M.
[Atmospheric Trajectory and Orbit of the Osceola Meteorite \(January 24, 2016\)](#) [#6188]
 We present a summary on the trajectory reconstruction, dark flight simulations and the pre-impact orbit estimate for the day-light fireball widely observed over northern Florida (USA), on January 24, 2016 at 10:27 EST (15:27 UTC).
- 4:15 p.m. Benedix G. K. * Forman L. V. Daly L. Godel B. Esteban L. Meier M. M. M. Maden C. Busemann H. Yin Q.-Z. Sanborn M. Ziegler K. Friedrich J. M. Strasser J. W. Welten K. C. Caffee M. W. Glavin D. P. Dworkin J. P. Bland P. A. Paxman J. P. Towner M. C. Cupak M. Sansom E. K. Howie R. M. Devillepoix H. A. R. Cox M. A. Jansen-Sturgeon T. Hartig B. A. D. Bevan A. W. R.
[Mineralogy, Petrology and Chronology of the Dingle Dell Meteorite](#) [#6229]
 Halloween rock is / New ordinary chondrite / Fresh and pristine, Wow!
- 4:30 p.m. Chennaoui Aoudjehane H. * Mazurier A. El Albani A. Devouard B. Rochette P. Boudouma O. Shisseh T.
[Tamdakht Meteorit \(Morocco\): An Important Fall with a Rare Fusion Crust](#) [#6140]
 Tamdakht is an H5 OC fall in Morocco on 20th December 2008. This fall has a very thick fusion crust that we prospected by different analytical technics to understand its history of formation, and if it may inform on the micrometeorites formation.
- 4:45 p.m. Rosén Å. V. * Hofmann B. A. Schumann M.
[Cosmogenic Radionuclide Activities in Five Recent Meteorite Falls](#) [#6219]
 Results from gamma-ray spectrometry measurements on five recent meteorite falls. Implications to the sampled falls and ongoing screening of finds.