

Tuesday, May 9, 2017

SESSION IV

3:30 p.m. Sage East

Chairs: Matthew Payne
Kevin Walsh

- 3:30 p.m. Hernández-Reséndiz P. * Cervantes-de la Cruz K. E. Segura A. U'Ren A.
Cruz-Ramirez H. Ángeles-García B. S.
[Barred Olivine Chondrules Melts Generated Experimentally and Their Thermal Histories](#) [#2006]
We simulate the formation of chondrules by melting olivine grains with 50W CO₂ laser. We measure the temperature during the formation of the artificial chondrules. We compare the melts characteristics with the natural chondrules.
- 3:35 p.m. Montoya-Perez M. A. * Cervantes-de la Cruz K. E. Ruvalcaba-Sil J. L.
[Nondestructive Method for Bulk Chemical Characterization of Barred Olivine Chondrules](#) [#2026]
This work develops a bulk chemical characterization of barred olivine chondrules based on the XRF analysis using a portable equipment at the National Research and Conservation Science Laboratory of Cultural Heritage (LANCIC-IF) in Mexico City.
- 3:40 p.m. Cervantes-de la Cruz K. E. * Hernández-Reséndiz P. Segura A. Cruz-Hernández H.
Ángeles-García B. S. U'Ren A.
[Fast Cooling of Chondrules to Prevent Evaporation of Fe-Ni: Constraints from Experimental Chondrules](#) [#2019]
Crystals edges are natural frontiers where Fe-Ni condensate during crystallization of chondrules. Quick time are necessary to prevent the volatilization of Fe-Ni.
- 3:45 p.m. Walsh K. J. *
[Constraining the Early Asteroid Belt](#) [#2031]
Here we focus on the implications for the primordial asteroid belt mass and dynamical excitement for different flavors of terrestrial planet formation models.
- 4:25 p.m. Gladman, B. *
Dynamics of Meteoroids and Their Parent Bodies
- 4:45 p.m. Payne M. J. *
[Extinct Stars and Eviscerated Planets: Using Observations of White Dwarf Pollution to Understand the Formation, Composition and Evolution of Planetary Systems](#) [#2005]
I will discuss the work that will be required for the white-dwarf community to be able to extract the unique data that only white dwarf systems can supply on the fundamental processes governing the formation and evolution of planetary systems.
- 5:05 p.m. Lawler S. M. *
[How Would Planet 9 \(if it Exists\) Affect the Distribution of Pebbles and Planetesimals in the Outer Solar System?](#) [#2027]
I use dynamical simulations of the distant Kuiper Belt with or without an additional Planet 9 to discuss the possibilities for Planet 9's formation, and whether or not planetesimal and pebble belts could survive this process.