Thursday, April 27, 2017
SOLAR SYSTEM SITES: ICE AND OCEAN WORLDS:
ASSESSING CERES' PAST AND PRESENT HABITABILITY
4:15 p.m. Arizona Ballroom A-C

Chairs: **Julie Castillo-Rogez**
Marc Neveu

4:15 p.m. Raymond C. A. * Russell C. T. Castillo-Rogez J. C.
Results of the Dawn Mission to Ceres **[#3463]**
Dawn has shown that Ceres was shaped by aqueous processes consistent with circulating fluids that likely created a habitable environment early in its history.

4:30 p.m. Travis B. J. *
On the Long-Term Habitability of Ceres **[#3620]**
Two-dimensional numerical modeling of Ceres suggests a partially differentiated body with a core that remains wet and warm throughout its history.

4:45 p.m. Neveu M. * Desch S. J. Castillo-Rogez J. C.
Physical and Chemical Conditions of Ceres' Interior Over Time: Implications for Habitability **[#3007]**
Muddy interior / Makes Ceres habitable / For billions of years.

5:00 p.m. Ruesch O. * Nathues A. Jaumann J. Quick L. C. Castillo-Rogez J. C. Bland M. T. Bowling T. J. Byrne S. Hiesinger H. Krohn K. McFadden L. A. Neesemann A. Otto K. Schenk P. Scully J. Sykes M. V. Williams D. A. Raymond C. A. Russell C. T.
Faculae on Ceres: Implications for Potential Fluids in the Subsurface **[#3624]**
We discuss the morphologies of bright spots (faculae) within Occator Crater, Ceres, using Dawn data. The role of fluids in their formation will be presented.

5:15 p.m. Castillo-Rogez J. C. * Young E. D. Neveu M. Raymond C. A. Rivkin A. S. Prettyman T. H. Ruesch O. Fu R. Ermakov A. I. De Sanctis M. C. Ammannito E. Russell C. T.
Ceres' Astrobiological Significance — Pre- and Post-Dawn Perspectives **[#3594]**
Observations by the Dawn missions have confirmed earlier predictions that Ceres hosted habitable conditions and further suggest the current occurrence of liquid.

5:30 p.m. Houtkooper J. M. * Schulze-Makuch D.
Ceres: A Frontier of Astrobiology **[#3252]**
Ceres might harbor a habitable subsurface ocean. Some of its liquids ascend, are deposited on Ceres´ surface, and possibly contain recoverable biosignatures.