

Tuesday, April 25, 2017
**NEW TECHNOLOGIES AND TECHNIQUES: OTHER TECHNOLOGIES AND TECHNIQUES:
 BIG DATA IN ASTROBIOLOGY**
 4:15 p.m. Mesa Room

**Chairs: Robert Hazen
 Arsev Aydinoglu**

- 4:15 p.m. Lafuente B. * Bristow T. Stone N. Pires A. Keller R. M. Downs R. T. Blake D. Dateo C. Fonda M.
[*Data Sharing in Astrobiology: The Astrobiology Habitable Environments Database \(AHED\) and the CheMin Database*](#) [#3623]
 AHED is a central, high-quality, long-term data repository to store, manage, and visualize information pertinent to the advancement of the field of astrobiology.
- 4:30 p.m. Stone N. * Lafuente B. Keller R. M. Downs R. T. Blake D. Fonda M. Dateo C. Pires A.
[*Collaborative Data Publication Utilizing the Open Data Repository's Data Publisher*](#) [#3545]
 Data Publisher aims to provide an easy-to-use software tool that will allow researchers to create and publish database templates and related data.
- 4:45 p.m. Ma X. * Fox P. A. Kolankowski S. Hummer D. Hazen R. M. Golden J. J. Meyer M. B.
[*Leveraging Data Science for Geoscience: Experience from the Deep Time Data Infrastructure*](#) [#3602]
 Introduce the data interoperability issue from a broad background and show a few best practices from the Deep Time Data Infrastructure project.
- 5:00 p.m. Meyer M. B. Hazen R. M. * Eleish A. Hummer D. R. Liu C. Morrison S. M.
 Keck Deep-Time Data Collaboration
[*Deep-Time Data Infrastructure: Visualizing the Co-Evolution of Planets and Life*](#) [#3223]
 The integration of deep-time data from Earth and life sciences, coupled with new visualization techniques, advances understanding of planetary evolution.
- 5:15 p.m. Hinkel N. R. * Galvez R.
[*Predicting Possible Exoplanet Hosts by Applying Machine Learning Techniques to Stellar Abundances*](#) [#3657]
 We apply a supervised machine learning algorithm to stellar abundances via the Hypatia Catalog to predict the presence of giant and terrestrial exoplanets.
- 5:30 p.m. Doloboff I. J. * Eshelman E. J. Wanger G. Hara E. Paez V. M. Orphan V. J. Amend J. P. Beegle L. W. Bhartia R.
[*A Terrestrial Analogs Database for Mars and Europa Mission Operations Support*](#) [#3564]
 Discussing a permanent, reliable, and cross-disciplinary research data management repository. MIND hosts and integrates diverse datasets in a novel way.