

Tuesday, April 25, 2017
**ASTROBIOLOGY AS A HUMAN ENDEAVOR: SETI:
 NEW STRATEGIES FOR SETI**
 10:15 a.m. Mesa Room

Chairs: Carl DeVito

Jacob Haqq-Misra

- 10:15 a.m. Harp G. R. *
[*Lessons Learned and Strategies for the Search for Extraterrestrial Intelligence Using Interferometry at the Allen Telescope Array*](#) [#3725]
 Description of recent SETI activity at the Allen Telescope Array.
- 10:30 a.m. Zubrin R. M. *
[*Self-Expanding Noospheres: Their Existence and Detectability Over Interstellar Distances*](#) [#3747]
 Intelligent species create new resources through invention which speeds as their population and technology increases. This leads to self-expanding noospheres.
- 10:45 a.m. Herzing D. L. *
[*Bio and Techno Signatures in Earth Bound Species: What We Know*](#) [#3327]
 Nonhuman species on Earth use tools, complex manipulation of communication signals, social skills and processes, and weapons during interspecific interactions.
- 11:00 a.m. Rothschild L. J. * Navarette J. Kent R. E. McCutcheon G. Pless E. Paulino-Lima I. G.
[*Biology as a Key Technological Foundation for Settlement Beyond Earth*](#) [#3720]
 Moving materials beyond Earth is limited by mass. Exploiting biology as a technology is key. With synthetic biology can be produce a range of products.
- 11:15 a.m. Bains W. * Schulze-Makuch D.
[*Testing the Cosmic Zoo Hypothesis: How Frequent is Complex Life in the Universe?*](#) [#3260]
 Advancements in remote sensing technologies for exoplanets and site visits of planetary bodies in the solar system allows testing for the Cosmic Zoo hypothesis.
- 11:30 a.m. Forgan D. H. *
[*Exoplanet Transits as the Foundation of an Interstellar Communication Network*](#) [#3076]
 I model the growth of an interstellar communications network via pairwise ETI observations of exoplanet transits, analysing its robustness using graph theory.
- 11:45 a.m. Wolf E. T. * Toon O. B.
[*Non-Linear Dependence of Equilibrium Climate Sensitivity on CO₂, Temperature, and Solar Insolation: Implications for Earth's Climate History and Future*](#) [#3035]
 We use a 3D climate system model to study equilibrium climate sensitivity across many orders of magnitude of CO₂, and over a wide range of solar constants.
- 12:00 p.m. Korpela E. J. * Cobb J. Lebofsky M. Siemion A. P. V. Werthimer D.
[*SETI@home in the Era of Breakthrough Listen*](#) [#3488]
 I will describe in the data sources the data processing techniques and the candidate identification process SETI@home uses with Breakthrough Listen.
- 12:15 p.m. *Lunch*