April 24, 2017

**Monday Morning, 8:30 a.m.**

Arizona Ballroom:  **Plenary: Planetary Protection**

**Monday Morning, 10:15 a.m.**

Arizona Ballroom A-C:  **Origin and Evolution of Life: Prebiotic Chemistry: Mineralogy and the Origin of Life**

Arizona Ballroom D:  **Exoplanets: Biosignatures: Pigments and Other Biological Surface Features as Exoplanet Biosignatures**

followed at 11:15 a.m. by

Arizona Ballroom D:  **Exoplanets: Biosignatures: The Science of Exoplanet Biosignatures Using Space and Ground-Based Telescopes I**

Arizona Ballroom E-G:  **Solar System Sites: Ice and Ocean Worlds: Biochemical Strategies for Searching for Signs of Life On and Within Ocean Worlds**


followed at 11:15 a.m. by


Mesa Room:  **Astrobiology as a Human Endeavor: Planetary Protection: Astrobiology and Planetary Protection I**

**Monday Afternoon, 1:30 p.m.**

Arizona Ballroom A-C:  **Origin and Evolution of Life: Prebiotic Chemistry: Functional Biopolymers I**

Arizona Ballroom D:  **Exoplanets: Biosignatures: The Science of Exoplanet Biosignatures Using Space and Ground-Based Telescopes II**

Monday Afternoon (continued)

Palo Verde

Solar System Sites: Mars: Biosignature Detection on Mars I: Mission Data and Instruments

Mesa Room

Astrobiology as a Human Endeavor: Planetary Protection: Astrobiology and Planetary Protection II

followed at 2:15 p.m. by

Mesa Room

Astrobiology as a Human Endeavor: Astrobiology Education and Public Outreach: Knowing What and How to Communicate Astrobiology Concepts Workshop

Monday Evening, Poster Session I: Presenters Available 7:00–8:00 p.m.

Main Hall

Topics listed below will be highlighted between 7:00–8:00 p.m.

Astrobiology as a Human Endeavor: Astrobiology Education and Public Outreach: Innovations in Astrobiology Teaching and Learning
Exoplanets: Habitability: Connecting Modeling and Observations in the Search for Habitable Planets
Exoplanets: Habitability: Formation of Habitable and “Earth-Like” Planets
Exoplanets: Habitability: Ionizing Radiation as a Constraint on Habitability
Exoplanets: Habitability: Redox Processes in Astrobiology from Nebulae to Life
Origin and Evolution of Life: Prebiotic Biochemistry: Ab Initio Computational Prebiotic Chemistry
Origin and Evolution of Life: Prebiotic Biochemistry: From Molecules To Cells
Origin and Evolution of Life: Prebiotic Chemistry: Experimental Insights into Organic Geochemistry
Origin and Evolution of Life: Prebiotic Chemistry: Functional Biopolymers
Origin and Evolution of Life: Prebiotic Chemistry: Journey to the Centre of the Earth: Intraterrestrial Life on Extraterrestrial Planets
Origin and Evolution of Life: Prebiotic Chemistry: Mineralogy and the Origin of Life
Origin and Evolution of Life: Theory/Fundamental Questions: Laws of Life
Solar System Sites: Mars: Habitability and Preservation Potential of Silica-Producing Hydrothermal Systems
Solar System Sites: Mars: Modern and Ancient Biosignatures and the Search for Life on Mars

Monday Evening, Poster Session II: Presenters Available 8:00–9:00 p.m.

Main Hall

Topics listed below will be highlighted between 8:00–9:00 p.m.

Astrobiology as a Human Endeavor: Astrobiology Education and Public Outreach: Astrobiology and Planetary Protection
Astrobiology as a Human Endeavor: New Strategies for SETI
Exoplanets: Biosignatures: Pigments and Other Biological Surface Features as Exoplanet Biosignatures
Exoplanets: Habitability: The Apple Doesn’t Fall Far from the Tree: Insights into Planetary Habitability from Stellar Characterization
Exoplanets: Habitability: The Habitablety of Proxima Centauri b
Exoplanets: Biomarkers: The Science of Exoplanet Biosignatures Using Space and Ground-Based Telescopes
Origin and Evolution of Life: Prebiotic Chemistry: Electron Transfer Reactions of Interest to Astrobiologists
Origin and Evolution of Life: Prebiotic Chemistry: Life Without Light: New Developments and Perspectives in Chemolithotrophic Metabolism and Its Geochemical Signatures
Poster Session I (continued)

Origin and Evolution of Life: Prebiotic Chemistry: Origin of Life Hypotheses: Salt Water (Ocean Vents) or Fresh Water (Pools on Land)

Origin and Evolution of Life: Prebiotic Chemistry: Reaction Kinetics, Thermodynamics, and Habitability

Solar System Sites: Mars: Biosignature Detection on Mars

Solar System Sites: Mars: Modern Mars Habitability

April 25, 2017
Tuesday Morning, 8:30 a.m.

Arizona Ballroom

Plenary: Recent Developments in Origin of Life Studies

Tuesday Morning, 10:15 a.m.

Arizona Ballroom A-C

Exoplanets: Habitability: Ionizing Radiation as a Constraint on Habitability

Arizona Ballroom D

Solar System Sites: Ice and Ocean Worlds: Seeking Evidence of Habitable Conditions and Life Activity in Serpentinizing Systems

Arizona Ballroom E-G

Origin and Evolution of Life: Prebiotic Chemistry: Ab Initio Computational Prebiotic Chemistry

followed at 11:15 a.m. by

Arizona Ballroom E-G


Palo Verde


Mesa Room

Astrobiology as a Human Endeavor: SETI: New Strategies for SETI

Tuesday Afternoon, 1:30 p.m.

Arizona Ballroom A-C

Origin and Evolution of Life: Prebiotic Chemistry: Functional Biopolymers II

Arizona Ballroom D


followed at 2:30 p.m. by

Arizona Ballroom D

Exoplanets: Habitability: Formation of Habitable and “Earth-Like” Planets I

Arizona Ballroom E-G

Origin and Evolution of Life: Theory/Fundamental Questions: Laws of Life I

Palo Verde

Solar System Sites: Mars: Biosignature Detection on Mars II: Analogue Exploration

Mesa Room


Tuesday Afternoon, 4:15 p.m.

Arizona Ballroom A-C

Origin and Evolution of Life: Prebiotic Chemistry: Functional Biopolymers III

Arizona Ballroom D

Exoplanets: Habitability: Formation of Habitable and “Earth-Like” Planets II

Arizona Ballroom E-G

Origin and Evolution of Life: Theory/Fundamental Questions: Laws of Life II

Palo Verde

Solar System Sites: Mars: Biosignature Detection on Mars III: Habitability Studies

Mesa Room

New Technologies and Techniques: Other Technologies and Techniques: Big Data in Astrobiology
April 26, 2017

Wednesday Morning, 8:30 a.m.

Arizona Ballroom  Plenary:  Astrobiology Education:  In a Diverse World...And Toward a Better One

Wednesday Morning, 10:15 a.m.

Arizona Ballroom D  Exoplanets:  Habitability:  Connecting Modeling and Observations in the Search for Habitable Planets I

followed at 11:15 a.m. by

Palo Verde  Solar System Sites:  Mars:  Modern Mars Habitability I
Mesa Room  Astrobiology as a Human Endeavor:  Astrobiology Education and Public Outreach:  Innovations in Astrobiology Teaching and Learning I

Wednesday Afternoon, 1:30 p.m.

Arizona Ballroom D  Exoplanets:  Habitability:  Connecting Modeling and Observations in the Search for Habitable Planets II
Palo Verde  Solar System Sites:  Mars:  Modern Mars Habitability II
Mesa Room  Astrobiology as a Human Endeavor:  Astrobiology Education and Public Outreach:  Innovations in Astrobiology Teaching and Learning II

Wednesday Afternoon, 4:15 p.m.


Wednesday Evening, Poster Session III:  Presenters Available 7:00–8:00 p.m.

Main Hall  Topics listed below will be highlighted between 7:00–8:00 p.m.

Miscellaneous Topics in Astrobiology

New Technologies and Techniques:  Other Technologies and Techniques:  Astrobiology ‘Omics’:  Using Systems Biology to Address Big Questions in Astrobiology

New Technologies and Techniques:  Other Technologies and Techniques:  Big Data Astrobiology

Origin and Evolution of Life:  Evolution/Genetics:  Current Superlatives and Contenders for “Extreme” Life on Earth
Origin and Evolution of Life:  Evolution/Genetics:  Early Genomes, Ribosomes, and Translation
Origin and Evolution of Life:  Evolution/Genetics:  Major Transitions in Evolution
Solar System Sites:  Ice and Ocean Worlds:  Assessing Ceres’ Past and Present Habitability
Poster Session II (continued)

Solar System Sites: Ice and Ocean Worlds: Biochemical Strategies for Searching for Signs of Life On and Within Ocean Worlds

Solar System Sites: Ice and Ocean Worlds: Creative Destruction? The Survival and Fate of Microbes and Molecules at the Near-Surface of Icy Worlds

Solar System Sites: Ice and Ocean Worlds: Habitability in Subsurface Oceans

Wednesday Evening, Poster Session IV: Presenters Available 8:00–9:00 p.m.

Main Hall

Topics listed below will be highlighted between 8:00–9:00 p.m.


New Technologies and Techniques: Life Detection: In Situ Life Detection: Approaches, Challenges, and Opportunities


New Technologies and Techniques: Other Technologies and Techniques: Stable Isotope Techniques

New Technologies and Techniques: Other Technologies and Techniques: Technology for Accessing Ocean Worlds

Origin and Evolution of Life: Evolution/Genetics: Experimental Microbial Evolution

Origin and Evolution of Life: Evolution/Genetics: How do Symbioses Enable Life to Colonize New Habitats?

Origin and Evolution of Life: Evolution/Genetics: Understanding the Role of Viruses: Signs of Extraterrestrial Life, Impacts on Biogeochemistry, and Research into the Origin and Evolution of Life


Solar System Sites: Ice and Ocean Worlds: Habitability of Ocean Worlds

Solar System Sites: Ice and Ocean Worlds: Seeking Evidence of Habitable Conditions and Life Activity in Serpentinizing Systems

April 27, 2017

Thursday Morning, 8:30 a.m.

Arizona Ballroom

Plenary: The Evolutionary Transition from Anoxygenic to Oxygenic Photosynthesis

Thursday Morning, 10:15 a.m.

Arizona Ballroom A-C

New Technologies and Techniques: Other Technologies and Techniques: Stable Isotope Techniques

followed at 11:15 a.m. by

Arizona Ballroom A-C

Solar System Sites: Ice and Ocean Worlds: Creative Destruction? The Survival and Fate of Microbes and Molecules at the Near-Surface of Icy Worlds

Arizona Ballroom D


Arizona Ballroom E-G

Origin and Evolution of Life: Evolution/Genetics: Early Genomes, Ribosomes, and Translation

Palo Verde

Solar System Sites: Mars: Modern and Ancient Biosignatures and the Search for Life on Mars I
Thursday Morning (continued)
Mesa Room  Origin and Evolution of Life: Prebiotic Chemistry: Reaction Kinetics, Thermodynamics, and Habitability

followed at 11:15 a.m. by
Mesa Room  Origin and Evolution of Life: Prebiotic Chemistry: Electron Transfer Reactions of Interest to Astrobiologists

Thursday Afternoon, 1:30 p.m.

followed at 2:45 p.m. by
Arizona Ballroom E-G  Origin and Evolution of Life: Evolution/Genetics: Experimental Microbial Evolution
Palo Verde  Solar System Sites: Mars: Modern and Ancient Biosignatures and the Search for Life on Mars II
Mesa Room  New Technologies and Techniques: Life Detection: In Situ Life Detection: Approaches, Challenges, and Opportunities

Thursday Afternoon, 4:15 p.m.
Arizona Ballroom A-C  Solar System Sites: Ice and Ocean Worlds: Assessing Ceres’ Past and Present Habitability
Arizona Ballroom D  Origin and Evolution of Life: Prebiotic Chemistry: Life Without Light: New Developments and Perspectives in Chemolithotrophic Metabolism and Its Geochemical Signatures
Arizona Ballroom E-G  Origin and Evolution of Life: Evolution/Genetics: Cellularity, Multicellularity, and Endosymbiosis: Major Transitions and Their Impacts on the Biosphere
Palo Verde  Solar System Sites: Mars: Habitability and Preservation Potential of Silica-Producing Hydrothermal Systems
Mesa Room  New Technologies and Techniques: Other Technologies and Techniques: Application of Single-Cell, Nanopore, and Other Tiny Technologies

April 28, 2017
Friday Morning, 8:30 a.m.
Arizona Ballroom  Plenary: Getting Astrobiology on Missions

Friday Morning, 10:15 a.m.

followed at 11:15 a.m. by
Arizona Ballroom D  Exoplanets: Habitability: The Habitability of Proxima Centauri b
**Friday Morning (continued)**

Palo Verde  
**Origin and Evolution of Life: Prebiotic Chemistry: From Molecules to Cells**  
*followed at 11:15 a.m. by*

Palo Verde  
**New Technologies and Techniques: Life Detection: Life Detection Lessons from Analogue Environments on Earth I**

**Friday Afternoon, 1:30 p.m.**

Arizona Ballroom A-C  

Arizona Ballroom D  
**Exoplanets: Habitability: The Apple Doesn’t Fall Far from the Tree: Insights into Planetary Habitability from Stellar Characterization**

Arizona Ballroom E-G  
**Origin and Evolution of Life: Evolution/Genetics: Current Superlatives and Contenders for “Extreme” Life on Earth**

Palo Verde  
**New Technologies and Techniques: Life Detection: Life Detection Lessons from Analogue Environments on Earth II**

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