### An evening of wonder: Life and Art on Earth at beyond

Is there life somewhere else in the universe? How would life look like in other planets and how can we find it? How did life originate on Earth? Explore and ask scientists about what they do to answer some of these questions.

### 5:30-7:00 pm Exploration with scientists - Interactive stations Location: Ferst Center for the Arts Lobby

• Light installation by Bojana Ginn. Dive into different worlds, at different scales. This journey from micrometers to kilometers include different environments and life forms!

Bojana Ginn is an interdisciplinary artist who creates multimedia light installations, sculpture and photography. Her work is shown in galleries and museums in Atlanta, New York, Baltimore, Nashville, Berlin, Venice, and in international SciArt Conferences in the US, Belgium, and the Netherlands.

https://bojanaginn.com

#### · Evolution of multicellularity.

Watch Dr. Tony Burnetti do a live exhibition on how small organisms can evolve.



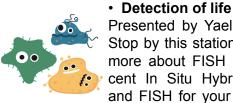
Dr. Tony Burnetti got his PhD at Duke University. He currently works at the Ratcliff lab, where they evolve single-celled yeast into multicellular forms in order to understand the earliest steps that may have lead to the formation of animal life on Earth from microbes.

· Rovers on Mars. Provided by Dr. Reza Ahmadzadeh. Learn about some obstacles that scientists face when sending rovers to explore other planets.





Dr. Reza Ahmadzadeh is a Postdoctoral Fellow with the School of Interactive Computing at Georgia Institute of Technology. He is a member of the Robot Autonomy and Interactive Learning (RAIL) research lab. His interests include various forms of robot learning and machine learning algorithms.



Presented by Yael Toporek Stop by this station to learn more about FISH (Fluorescent In Situ Hybridization) and FISH for your own paper microbe!

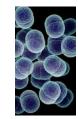
Yael is a PhD student in the School of Biological Sciences working on bioremediation of contaminated soils and groundwater.

#### Art Exhibition.

Enjoy our art exhibit based on origins of life, the environment and the search for life in other planets



Planetary domino. Learn about bacteria and how they consume and produce chemicals, modifying their environment.



• Is this alive? Come and find out if you can predict which things are alive. Ask scientists what they do to verify if something they found is alive.

 Polymerization demo from the Center for Chemical Evolution. Join some chemists to learn how some substances can react to form big polymers.



The Center for Chemical Evolution is a Center funded by NSF and NASA searching for molecules and reactions responsible for the initial synthesis and evolution of the polymers associated with life.

### 7:00-7:30 pm The Golden Record dance performance Location: Ferst Center outdoor amphiteater

Humanity's journey to find out who we are. A movement-based performance with live music.



The Hereafter Artist Collective seeks to introduce different audiences to the contributions of deceased artists by producing shows in a different format.

Flight of Swallows, established in 2010 by co-founders Deisha Oliver-Millar and Sadie Hawkins, explores collaborative improvisation: music and movement working together.

#### 7:30-8:00 pm Meet an astronaut: Dr. Lawrence Delucas! Location: Student Center Ballroom

Join us at the Student Center Ballroom and have Dr. Lawrence Delucas answer questions about space and his experience at the International Space Station



Dr. DeLucas was a member of the crew of Space Shuttle Columbia for STS-50 (June 25-July 9, 1992), the United States Microgravity Laboratory-1 (USML-1) Spacelab mission. Over a two-week period, the crew conducted a wide variety of experiments relating to materials processing and fluid physics. At mission conclusion, DeLucas had traveled over 5.7 million miles in 221 Earth orbits, and had logged over 331 hours in space.

Dr. DeLucas served as the Chief Scientist of the International Space Station of NASA Headquarters from October 1994 to October 1995. Dr. DeLucas serves as Director of the Comprehensive Cancer Center X-ray Core Facility and the Director of the Center for Biophysical Sciences and Engineering at the University of Alabama at Birmingham (UAB).

### Want to learn more?



Georgia Tech Astrobiology Building an understanding of life in the cosmos https://astrobiology.blog

Center for Chemical Evolution http://centerforchemicalevolution.com

Evolution of multicellularity http://www.snowflakeyeastlab.com/index.htm

Stated clearly animations http://statedclearly.com

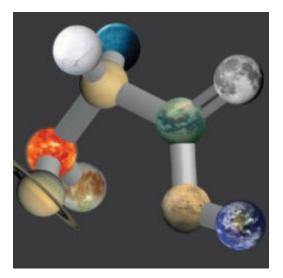
NASA Astrobiology https://astrobiology.nasa.gov/

RAIL (Robot Autonomy and Interactive Learning) Lab http://www.rail.gatech.edu



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# Program



AbGradCon2018

June 6<sup>th</sup>, 2018

