## SESSION 3 – 1:00 – 1:50 PM

Jacqueline Velasquez Carrion, Sophia Darling, Veronica Suarez Cotero, and Max Vazquez Dominguez (K-8)
Presider: Katheryn R. Mullen
Room:202
**Using engineering to build a conveyor belt**

Participants will construct a conveyor belt using the engineering design model, collaborate to complete a challenge using their machine, and evaluate their prototype.

Denise Webb and Amber Hoke (K - 12)
Presider: David Osmond
Room: 216
**Staging Family Science Nights**

A successful Family Science Night is a perfect coming together of informal science learning, community support, and schoolwide excitement. Come find out how to start or step up your STEAM family program. Target audience K-12!

Clare Swinford and Patricia Forehand (K-5)
Presider: Leslie Simanton-Coogan
Room: 213
**Junior Ranger Space Tech & Spaceflight Explorers**

Calling all junior explorers! NASA partnered with the National Park Service to create the “Junior Ranger Space Tech Explorer” and "Junior Ranger Spaceflight Explorer" activities. The activities were made originally to celebrate of the 50th anniversary of Earth Day and the Apollo moon landing. The activities explore what NASA and our national parks have in common and how space technology benefits your life, parks and the planet. Learn about the Moon, space vehicles that will take humans to the Moon and to Mars, and national parks across the United States. With the use of Ozobots, activities will focus on craters and landforms.

Amanda Moffett
Presider: Logan Kageorge
Room: 232
**Probability and the Drake Equation**

The Drake Equation is a framework used by astronomers to estimate the number of alien civilizations in the Milky Way Galaxy that might possibly be trying to communicate with our civilization. This is clearly a complex problem to investigate, combining knowledge of astronomy, biology, technology, and history, so the Drake Equation works by combining a series of probabilistic factors, some of which we know reasonably well and others that are highly uncertain. In this session, we will consider the Drake Equation by first introducing basic probability concepts and then applying those concepts to derive our own estimates of the number of communicative alien civilizations in our home Galaxy.