DEPARTMENT OF PHYSICS AND ASTRONOMY

COLLOQUIUM ***IN-PERSON EVENT***

Shattered Fragments: Origins and evolution of asteroid (101955) Bennu and the NASA OSIRIS-REx mission

Erica R. Jawin

Postdoctoral Research Geologist
Center for Earth and Planetary Studies
National Air and Space Museum
Smithsonian Institution

In 2018, NASA's OSIRIS-REx mission began observing near-Earth asteroid (101955) Bennu from orbit, culminating in the collection of a surface sample in October 2020. This sample is scheduled to arrive on Earth on September 24, 2023. Bennu has proved consistently surprising, from its unexpectedly rocky surface, to active particle ejections, and its extremely weak surface probed during sample collection. In this lecture I will discuss Bennu's origins through the catastrophic disruption of an ancient parent body, its migration from the outer Solar System to near-Earth space, and its evolution as a loosely bound aggregate. Once the sample is safely on Earth the OSIRIS-REx spacecraft will embark on its next chapter, to rendezvous with asteroid (99942) Apophis after its close approach with Earth in 2029.

Thursday, September 14, at 3:55 PM

IN-PERSON EVENT ROOM 202

Local Contact: Prof. Y. Abate, yohannes.abate@uga.edu