San Mateo County Astronomical Society

SMCAS General Meeting and Presentation on Friday September 6, 2019

Dr. Ross Beyer

SETI Institute – Senior Research Scientist

Charon, Pluto's Companion: What We're Learning from New Horizons

Friday, September 6, 2019 , College of San Mateo, Building 36
SMCAS General meeting at 7:00 p.m. ISC Room, room 110
Presentation at 8:00 p.m. Planetarium
Free and open to the public, free parking.

Pluto's large moon Charon turned out to be far more interesting than astronomers expected. Pluto was the star of the New Horizons show, but the features on Charon's surface tell a fascinating tale of how icy worlds could form far from the gravitational influences of the giant planets. There is evidence of a world-wide sub-surface ocean early on, and of global expansion as that ocean froze solid. Charon's surface also has a region of plains where icy materials may once have flowed and smoothed over the fractures present elsewhere on its surface. Dr. Ross Beyer will be your guide through this story of formation and change in the frozen reaches of the outer Solar System.

Ross is currently a Principal Investigator and Research Scientist with the Carl Sagan Center at the SETI Institute. He carries out his research in the Space Science and Astrobiology Division (Planetary Systems Branch, SST) and the Intelligent Robotics Group (part of the Intelligent Systems Division, TI) at the NASA Ames Research Center. Ross is also a Research Fellow with the Center for the Origin, Dynamics, and Evolution of Planets (CODEP) at UC Santa Cruz.

He studies surface geomorphology, surface processes, remote sensing and photogrammetry of the solid bodies in our Solar System--if you can stand on it, he's interested in what it's like and how it got that way. His work has been used to help plan landing sites on Mars landers and rovers starting with Spirit and Opportunity. He is also a member of the New Horizons Science Team that explored the Pluto System and is currently exploring in the Kuiper Belt.