

## **ASTRONOMICAL SOCIETY OF THE PACIFIC ABSTRACT**

### **ABSTRACT– Comparative Planetology**

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**Title: (100 characters):** Using Authentic Data to Facilitate Comparative Planetology & Student-led Classroom Investigations

**Abstract (1000 characters):**

This session will engage participants in a hands-on activity that uses stunning NASA imagery from space to help participants gain an understanding of how scientists use Earth to gain a better understanding of other planetary bodies in the solar system. Participants will make observations, develop identification criteria, and use evidence to justify inferences made about processes sculpting the surface of different planetary worlds. Participants will also “build” a comparative planetology feature wall that will facilitate a comparative view of major geologic processes and features across the inner solar system. This session will highlight additional comparative planetology activities and demonstrate how the use of authentic data and imagery can help facilitate student-led research in the classroom, helping teachers address the Next Generation Science Standards.

**Outcomes:** *describe what participants will take away from your workshop or paper; what new skills or techniques will they acquire; how will the community of practice in our field advance? (500 characters)*

Participants will take away both pedagogical and scientific knowledge. The activity will enable participants to experience authentic skills and practices used by scientists and experience the effectiveness of an activity designed using the 5E model of inquiry. Additionally, participants will gain a sense of how to use the power of inquiry and imagery from space as a hook to help facilitate student investigations in the classroom.