

# Outer Planet Flagship Missions

## Outer Planet Flagship Mission Instrument Workshop June 3-5 2008 Pasadena, California

The purpose of the workshop is to prepare the scientific community for an upcoming opportunity to propose instruments for the international Outer Planet Flagship mission that is planned for a new start in fiscal 2009. NASA and ESA are planning to issue a joint Announcement of Opportunity for scientific experiments to fly on the mission. A decision is expected in November on whether the mission is a Europa Jupiter System Mission (EJSM) or a Titan Saturn System Mission (TSSM). The AO is expected to be issued in the late winter or early spring of 2009.

Each mission option involves distinct challenges. EJSM includes two orbiters with instruments designed to operate in the severe radiation environment of the Jupiter system and many need to be sterilized to comply with planetary protection requirements for Europa. TSSM includes both an orbiter and in situ vehicle(s) and the instruments must make the best use of the current capability (power and mass) to accommodate limited payload capability and survive and operate in the cryogenic environment of Titan.

The workshop has been structured in two parts. The first day will provide an overview of the outer planet flagship program, the two missions and the constraints placed on the instruments based on the unique environments of the Jupiter and Saturn systems. Two subsequent days will run parallel sessions, one for each mission. One track will address the radiation and planetary protection issues for the EJSM mission. Critical topics such as the environment and radiation effects on parts and materials, shielding, and other topics of importance to instrument development and operations will be presented. The second track will focus on the TSSM in situ payload including the challenges of operating in the cryogenic environment. In conjunction with the International partners the session will give an overview of the possible in situ payload envisaged for Titan. There will also be an opportunity for poster presentations (with a 5-minute oral overview) on instrument concepts at each session.

JPL will be setting up a website soon to keep the community informed about the outer planet mission studies and various upcoming events, such as the outer planets instrument workshop. Until then, please look for updates on the OPAG and ESA websites:

The Outer Planets Assessment Group:  
<http://www.lpi.usra.edu/opag/>

ESA Cosmic Vision Programme:  
<http://sci.esa.int/>