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NASA SELECTS SMALL EXPLORER INVESTIGATIONS FOR CONCEPT STUDIES

Washington -- NASA has selected six candidate mission proposals for further evaluation as part of the agency's Small Explorer (SMEX) Program. The proposals will study the far reaches of the universe, including the Earth's thermosphere and ionosphere, the Sun, black holes, the first stars, and Earthlike planets around nearby stars.

Following detailed mission concept studies, NASA intends to select two of the mission proposals in the spring of 2009 for full development as SMEX missions. The first mission could launch by 2012. Both will launch by 2015. Mission costs will be capped at $105 million each, excluding the launch vehicle.

"We received many excellent proposals," said Mr. Charles Gay, deputy associate administrator for NASA's Science Mission Directorate, "The six we selected for further study offer outstanding science in a small satellite mission."

The selected proposals were judged to have the best science value among 32 compliant SMEX proposals submitted to NASA in January 2008. Each will receive $750,000 to conduct a six-month implementation feasibility study.

The selected proposals are:

-- Coronal Physics Explorer (CPEX), Principal Investigator Dennis G. Socker, Naval Research Laboratory, Washington, D.C. – CPEX will use a solar coronograph to study the processes responsible for accelerating the solar wind and generating the coronal mass ejections that can impact the Earth.

-- Gravity and Extreme Magnetism SMEX (GEMS), Principal Investigator Jean H. Swank, Goddard Space Flight Center, Greenbelt, Md. – GEMS will use an X-ray telescope to track the flow of highly magnetized matter into supermassive black holes.

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-- Interface Region Imaging Spectrograph (IRIS), Principal Investigator Alan M. Title, Lockheed Martin Space Systems Co., Palo Alto, Calif. – IRIS will use a solar telescope and spectrograph to reveal the dynamics of the solar chromosphere and transition region.

-- Joint Astrophysics Nascent Universe Satellite (JANUS*),* Principal Investigator Peter W.A. Roming, Pennsylvania State University, University Park, Penn. – JANUS will use a gamma-ray burst monitor to point its infrared telescope at the most distant galaxies to measure the star-formation history of the universe.

-- Neutral Ion Coupling Explorer (NICE), Principal Investigator Stephen B. Mende, University of California, Berkeley, Calif. – NICE will use a suite of remote sensing and in situ instruments to discover how winds and the composition of the upper atmosphere drive the electrical fields and chemical reactions that control the Earth's ionosphere.

-- Transiting Exoplanet Survey Satellite (TESS), Principal Investigator George R. Ricker, Massachusetts Institute of Technology, Cambridge, Mass. – TESS will use a bank of six telescopes to observe the brightest 2.5 million stars and discover more than 1,000 Earth-to-Jupiter-sized planets around them.

NASA also received 17 Mission of Opportunity proposals for consideration and will schedule an evaluation board at a later date.

The proposals are vying to be the 12th and 13th Small Explorer missions selected for full development. The Explorer program is designed to provide frequent, low-cost access to space for heliophysics and astrophysics missions with small to mid-sized spacecraft. The program is managed by NASA's Goddard Space Flight Center, Greenbelt, Md., for NASA's Science Mission Directorate.

For more information about the Explorer Program on the Internet, visit:

http://explorers.gsfc.nasa.gov

For information about NASA and space science on the Internet, visit:

http://www.nasa.gov

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