

## NASA'S MOON-MARS INITIATIVE JEOPARDIZES IMPORTANT SCIENCE OPPORTUNITIES, ACCORDING TO AMERICAN PHYSICAL SOCIETY REPORT

Washington, DC - November 22, 2004 - Shifting NASA priorities toward risky, expensive missions to the moon and Mars will mean neglecting the most promising space science efforts, states the American Physical Society (APS) Special Committee on NASA Funding for Astrophysics, in a report released today.

The committee points out that the total cost of NASA's ill-defined Moon-Mars initiative is unknown as yet, but is likely to be a substantial drain on NASA resources. As currently envisioned, the initiative will rely on human astronauts who will establish a base on the moon and subsequently travel to Mars. The program is in contrast to recent, highly successful NASA missions, including the Hubble Space telescope, the Mars Rover, and Explorer missions, which have revolutionized our understanding of the universe while relying on comparatively cheap, unmanned and robotic instruments. It is likely that such programs will have to be scaled back or eliminated in the wake of much more expensive and dangerous manned space exploration, according to the committee.

The following findings are among the most important points in the APS report:

- \* The recent spectacular successes of NASA's space telescopes and the Mars Rovers amply demonstrate that we can use robotic means to address many important scientific questions.
- \* Human exploration has a role to play in NASA, but it must be within a balanced program in which allocated resources span the full spectrum of the space sciences and take advantage of emerging scientific opportunities and synergies.
- \* Astronauts on Mars might achieve greater scientific returns than robotic missions, but they would come at such a high cost that scientific grounds, alone, would probably not provide a sufficient rationale.
- \* The scope of the Moon-Mars initiative has not been well-defined, its long-term cost has not been adequately addressed, and no budgetary mechanisms have been established to avoid causing major irreparable damage to the agency's scientific program.
- \* To accommodate the Moon-Mars initiative, NASA has already begun to reprogram its existing budget, resulting in indefinite postponement or serious delay of science programs that were assigned high priority by the National Academy of Sciences decadal studies.
- \* In addition to affecting NASA's internal priorities, an ill-defined Moon-Mars initiative of very large scale could harm programs in other science agencies.

The APS report includes three recommendations regarding the Moon-Mars initiative:

\* NASA should continue to be guided by the priorities recommended in the National Academy of Sciences (NAS) decadal studies in formulating its science programs.

\* Before the United States commits to the Moon-Mars proposal, a review of the initiative's science impact should be carried out by the National Academy of Science.

\* Before the United States commits to the Moon-Mars proposal, the likely budgetary impact should be estimated by the Government Accountability Office.

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About the APS:

The American Physical Society is the world's largest professional body of physicists, representing over 45,000 physicists in academia and industry in the US and internationally. It has offices in College Park, MD, and Ridge, NY. For more information: <http://www.aps.org>