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Robert Ramer, Chairman

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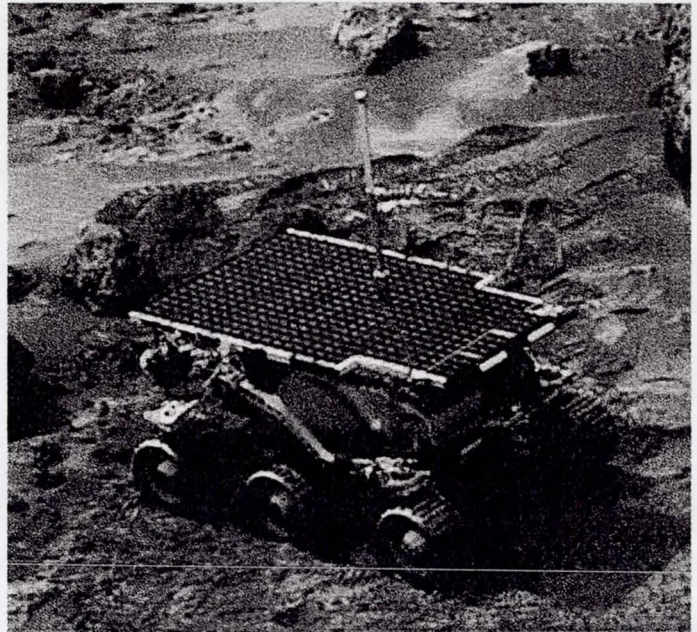
Cars on Mars

Pathfinder and Future Missions to the Red Planet

Cleveland Museum of Natural History
1 Wade Oval Drive, Cleveland OH

Wednesday, Sept 4, 2002

5:30 — 6:30 p.m. Registration & Dinner
6:30 — 7:25 p.m. NASA Speaker
7:25 — 8:00 p.m. Planetarium Show
8:00 — 10:00 p.m. Museum Open



Mars is one of the most fascinating planets in the solar system, featuring an atmosphere, water, and enormous volcanoes and canyons. The Mars Pathfinder, Global Surveyor, and Odyssey missions mark the first wave of the Planet Earth's coming invasion of the red planet, changing our views of the past and future of the planet and the possibilities of life. Scientist and science-fiction writer Geoffrey A. Landis will present experiences on the Pathfinder mission, the challenges of using solar power on the surface of Mars, and present future missions to Mars such as the upcoming Mars Twin Rovers, which will launch two highly-capable vehicles in 2003 to explore the surface of Mars.

Following the dinner and presentation, we will have the opportunity to attend the Shafran Planetarium's Best of Show. For over a decade, the Hubble Space Telescope has been peering into the near and far reaches of outer space. Spectacular images of planets, stars, nebulae and galaxies make up an expanding photo gallery of the universe. We've selected the most breathtaking vistas for your full-dome enjoyment! After the show, the museum will be open for two more hours so we can browse the galleries. Visit the Cleveland Museum of Natural History's web site at www.cmnh.org.

See next page for details on registering for this exciting event. Space is limited, so make your reservation early.

ABOUT THE SPEAKER

Geoffrey A. Landis is a scientist at the NASA John Glenn Research Center. He was a member of the Mars Pathfinder scientific team, where he analyzed solar energy and dust on Mars, and is currently a member of the science team for the 2003 "Mars Exploration Rovers" project. He works on advanced concepts for spaceflight. He was one of the first fellows of the NASA Institute of Advanced Concepts, where he worked on analyzing new concepts for laser-pushed lightsails. His research projects include investigating the effect of the Mars environment on power systems, advanced space propulsion concepts such as tethers and light-sails, laser- and microwave- power beaming investigations of space resources, and semiconductor physics. He has published over two hundred and fifty scientific papers in the fields of photovoltaics and astronautics, and holds four patents on photovoltaic device designs.

Dr. Landis is also a Hugo- and Nebula- award winning science fiction writer. His novel *Mars Crossing* won the Locus award for best first novel. His most recent book, *Impact Parameter (and Other Quantum Realities)*, which came out last November, collects some of his award-winning short fiction. It was named by *Publisher's Weekly* as one of the notable books of the year. More information can be found at his web page, www.sff.net/people/Geoffrey.Landis/.

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