Tuesday, March 16, 2004  
SPECIAL SESSION:  
MARS MISSIONS  
1:30 p.m.  Salon B

Chairs: A. F. Chicarro  
P. R. Christensen

1:30 p.m. Squyres S. W. *  Athena Science Team  
*Initial Results from the MER Athena Science Investigation at Gusev Crater and  
Meridiani Planum [2187]
This talk will provide an overview of the initial science results from the Mars Exploration  
Rover project.

1:45 p.m. Malin M. C. *  Athena Science Team  
*Geomorphology of the Mars Exploration Rover (MER-A) Landing Site from Observations  
by the Spirit Rover [2170]
The geomorphology of the MER-A landing site is defined by the interplay between processes and the  
native materials. Materials include silt, sand, granules, pebbles, cobbles and boulders. The primary  
transport agents are wind and potentially impact-related ballistic emplacement.

2:00 p.m. Arvidson R. E. *  Athena Science Team  
*Geology of Meridiani Planum as Inferred from Mars Exploration Rover Observations [2165]
The Mars Exploration Rover, Opportunity, landed in a 22 m wide by 3 m deep crater in Meridiani  
Planum on January 25, 2004 (UTC). We discuss initial observations and formulate tests of hypotheses  
that focus on the origin and evolution of the plains materials and implications for the role of water.

2:15 p.m. McSween H. *  Arvidson R.  Bandfield J.  Bell J.  Blaney D.  Calvin W.  Christensen P.  
Clark B.  Crisp J.  Economou T.  Farrand W.  Ghosh A.  Herkenhoff K.  Johnson J.  
Klingelhöfer G.  McLennan S.  Moersch J.  Morris R.  Rieder R.  Ruff S.  Schroeder C.  
Souza P.  Squyres S.  Wänke H.  Wyatt M.  Zipfel J.  
Preliminary Mineralogy and Geochemistry Results at the MER-A Landing Site in Gusev [2167]
Preliminary MER-A analyses indicate soil with similar composition to other Mars soils, and olivine-  
bearing basaltic rocks. These data do not yet support the hypothesis that Gusev Crater contains  
lacustrine or fluvial sediments.

2:30 p.m. Morris R. V. *  Squyres S.  Arvidson R.  Bell J. F. III  Christensen P. C.  
Gorevan S.  Herkenhoff K.  Klingelhöfer G.  Rieder R.  Farrand W.  Ghosh A.  Glotch T.  
Johnson J. R.  Lemmon M.  McSween H. Y.  Ming D. W.  Schroeder C.  de Souza P.  
Wyatt M.  Athena Science Team  
A First Look at the Mineralogy and Geochemistry of the MER-B Landing Site in  
Meridiani Planum [2179]
The second MER rover (Opportunity) landed on Meridiani Planum on January 24, 2004 inside a  
shallow crater. We present initial results for the mineralogy and geochemistry of the landing site.

2:45 p.m. Christensen P. *  Arvidson R.  Bandfield J. L.  Blaney D.  Budney C.  Calvin W.  Ciccolella S.  
Ruff S.  Saddat A.  Smith M. D.  Squyres S.  Woff M.  Wyatt M.  MER Science Team  
Mini-TES Observations of the Gusev and Meridiani Landing Sites [2186]
Mini-TES observations have been acquired of both the Gusev and Meridiani landing sites. The most  
recent results from the surface mineralogy, thermophysical properties, and atmospheric observations  
will be discussed.
The Mars Exploration Rovers carry Magnetic Properties Experiments designed to investigate properties of the air-borne dust in the Martian atmosphere. The presentation will give preliminary results of the experiments.

3:15 p.m. BREAK

This abstract describes the initial results from the high resolution multispectral imaging cameras on the Mars Exploration Rovers.

3:45 p.m. Wolff M. J. * Athena Science Team Atmospheric Science with the Mars Exploration Rovers: Things are Looking Up [#2171]
Although at first glance, the Mars Exploration Rover (MER) payload may be perceived as primarily suited to geological investigation, it is in fact quite well-suited to carry out a robust and dynamic program of atmospheric monitoring and characterization.

4:00 p.m. Chicarro A. F. * The Mars Express Mission — Initial Scientific Results from Orbit [#2174]
The ESA Mars Express mission is successfully orbiting around Mars and providing valuable scientific data. In addition to global studies of the surface, subsurface and atmosphere, the search for water everywhere on the planet is the main mission driver.

4:15 p.m. Neukum G. * HRSC Co-Investigator Team The HRSC Experiment in Mars Orbit: First Results [#1883]
First results of the HRSC experiment on the ESA Mars Express mission from the early orbital science phase will be presented.

4:30 p.m. Bibring J-P. * OMEGA team The OMEGA/Mars Express First Results [#2173]
OMEGA is the vis/IR spectral imager on board the ESA/Mars express mission. We will present the first results obtained from the early mapping phase, started in January 2004.

4:45 p.m. Bertaux J.-L. * Korablov O. Quemerais E. Perrier S. Fedorova A. Muller C. SPICAM Team SPICAM on Mars Express: First Results and First Observations of Water Ice at South Pole [#2178]
SPICAM is a dual UV-IR spectrometer (4.8kg) with a new AOTF technology. It provided the first simultaneous measurements of ozone and H2O vapor, first CO2 vertical profile by stellar occultation, and first spectral detection of H2O ice at South Pole.
5:00 p.m.  Pätzold M. * Asmar S. Barriot J. P. Dehant V. Hausler B. Hinson D. Simpson R. Tyler G.
Mars: Radio Science First Results [#2180]
Summary of first Mars Express bistatic radar experiment and other results.

5:15 p.m.  Lundin R. Sharber J. R. * Barabash S. Winningham J. D. Frahm R. A.
Initial Results from the ASPERA-3 Instrument on Mars Express [#2176]
ASPERA-3 on Mars Express contains four instruments, two of which address the escape of neutrals from the Martian Atmosphere and two which monitor the interaction of the solar wind with the Mars atmosphere. Initial results will be presented from the atmospheric interaction instruments.