Thursday, March 17, 2005
SPECIAL SESSION
CASSINI AT SATURN II: ORBITER AND TITAN RESULTS
8:30 a.m. Salon B

Chairs: D. L. Matson
L. A. Soderblom

8:30 a.m. Brown R. H. * Baines K. H. Bellucci G. Buratti B. J. Capaccioni F. Cerroni P. Clark R. N. Coradini A. Cruikshank D. P. Drossart P. Formisano V. Jaumann R. Matson D. L. McCord T. B. Mennella V. Nelson R. Nicolson P. Sicardy B. Sotin C.
Cassini VIMS at Saturn: The First 6 Months **[#1166]**
The Cassini Visual and Infrared Mapping Spectrometer (VIMS) has completed its first 6 months in orbit around Saturn and a summary of results will be presented.

8:45 a.m. Flasar F. M. * Cassini CIRS Investigation Team
Early Results on the Saturn System from the Composite Infrared Spectrometer **[#1444]**
We present early results from CIRS spectra on the temperatures, dynamics, and composition of Saturn, its rings, and its moons, Phoebe, Iapetus, and Titan.

9:00 a.m. Esposito L. W. Hansen C. J. * Colwell J. Hendrix A. R. McClintock W. E. Shemansky D. E. Stewart A. I. F. Hallett J. West R. A.
The Saturn System as Observed by Cassini's Ultraviolet Imaging Spectrograph **[#1586]**
Results from the Cassini Ultraviolet Imaging Spectrograph (UVIS) will be presented, focusing on recent observations of Titan and Saturn's icy satellites.

9:15 a.m. Gurnett D. A. * Kurth W. S. Hospodarsky G. B. Persoon A. M. Averkamp T. F. Cecconi B. Lecacheux A. Zarka P. Canu P. Cornilleau-Wehrlin N. Galopeau P. Roux A. Harvey C. Louarn P. Bostrom R. Gustafsson G. Wahlund J.-E. Desch M. D. Farrell W. M. Kaiser M. L. Goetz K. Kellogg P. J. Fischer G. Ladreiter H.-P. Rucker H. O. Alleyne H. Pedersen A.
Cassini Radio and Plasma Wave Observations at Saturn **[#1108]**
Results are presented from the Cassini radio and plasma wave instrument during the approach and first few orbits around Saturn.

9:30 a.m. Reisenfeld D. B. * Baragiola R. A. Crary F. J. Coates A. J. Goldstein R. Hill T. W. Johnson R. E. McComas D. J. Sittler E. C. Shappirio M. D. Steinberg J. T. Smith H. T. Szego K. Thomsen M. F. Tokar R. L. Young D. T.
Ion Composition in Saturn's Plasma Environment: Early Results from the Cassini Plasma Spectrometer **[#1887]**
We report preliminary ion composition findings made by the Cassini Plasma Spectrometer during the first two Cassini orbits, including the closest approach to Saturn and the rings during the tour, and a close flyby of Titan.

9:45 a.m. Dougherty M. K. * Cassini Magnetometer Team
Cassini Magnetometer Observations at Saturn **[#1677]**
This work describes magnetometer observations obtained during the first 6 months of Cassini's orbital tour at Saturn.

10:00 a.m. Krimigis S. M. * Mitchell D. G. Hamilton D. C. Krupp N. Livi S. Roelof E. C. Dandouras J. Mauk B. H. Brandt J. P. Paranicas C. Saur J. Armsrong T. P. Bolton S. Cheng A. F. Gloeckler G. Hsieh K. C. Ip W.-H. Lagg A. Lanzerotti L. J. McEntire R. W. Williams D. J.
Overview of Results from the Cassini Magnetospheric Imaging Instrument (MIMI) During the First Year of Operations **[#1361]**
A high-level overview of MIMI results includes corotation of the magnetosphere, overwhelming presence of water-product ions, identification of a radiation belt inside the D-ring, and inferred presence of neutral gas absorbing ions and electrons inward of Dione's orbit.

10:15 a.m. Doose L. R. * Engel S. Tomasko M. G. Dafoe L. E. West R. Lemmon M. T.
Aerosol and Cloud Properties at the Huygens Entry Site as Derived from the Descent Imager/Spectral **[#2222]**
The size, shape, and number density of Titan aerosols and clouds at the Huygens entry site vs. altitude is presented. The wavelength dependence of the optical properties is also described.

10:30 a.m. Lorenz R. D. * Elachi C. Stiles B. West R. Janssen M. A. Lopes R. M. Stofan E. Paganelli F. Wood C. Kirk R. L. Lunine J. Wall S.
Titan's Elusive Lakes? Properties and Context of Dark Spots in Cassini TA Radar Data **[#1682]**
RADAR shows dark spots; σ_0 seems like asphalt. Titan's ethane lakes?

10:45 a.m. Turtle E. P. * Dawson D. D. Fussner S. Hardegree-Ullman E. McEwen A. S. Perry J. Porco C. C. West R. A. Cassini ISS Team
Liquid Hydrocarbons on Titan's Surface? How Cassini ISS Observations Fit into the Story (So Far) **[#2311]**
Atmosphere desires; radar, but not eyes, implies; hydrocarbon seas.

11:00 a.m. Soderblom L. A. * Brown R. H. Cassini VIMS Team
Deconvolution of Cassini VIMS Titan Cubes into Atmospheric Spectral Scattering, Surface Topographic, and Surface Spectroscopic Components **[#1869]**
Methods are developed to deconvolve Cassini VIMS near-IR spectra of Titan into atmospheric scattering (diffuse radiance scattered to the S/C and downward to the surface), surface topographic signatures, and normalized spectral reflectance variations among surface units.

11:15 a.m. Nelson R. M. * Brown R. H. Hapke B. W. Smythe W. D. Kamp L. Boryta M. Baines K. H. Bellucci G. Biebring J. P. Buratti B. J. Capaccioni F. Cerroni P. Clark R. N. Coradini A. Cruikshank D. P. Drossart P. Formisano V. Jaumann R. Langevin Y. Matson D. L. McCord T. B. Mennella V. Nicholson P. D. Sicardy B. Sotin C.
Cassini VIMS Preliminary Exploration of Titan's Surface Hemispheric Albedo Dichotomy **[#2139]**
Photometric Analysis of Cassini VIMS Images of Titan suggests a hemispheric albedo dichotemy. The reflectance of the surface units is $0.05 < r < 0.2$. Large circular features may be palimpsests.

11:30 a.m. Rodriguez S. * Le Mouélic S. Sotin C. Buratti B. J. Brown R. H.
VIMS Observations of Titan During the First Two Close Flybys by the Cassini-Huygens Mission **[#1939]**
This paper describes VIMS observations of Titan's surface including the the high resolution images (2 km/pixel) that provide new clues on its geology.