

Monday, July 14, 2008
POSTER SESSION I: COMETARY OBSERVATIONS FROM X-RAY TO RADIO
4:00 p.m. Laurel and Kent Rooms

Snodgrass C. Fitzsimmons A. Jehin E. Manfroid J. Hutsemékers D.
[Optical Observations of Comet McNaught from La Silla](#) [#8328]

Weaver H. A. A'Hearn M. F. Arpigny C. Combi M. R. Feldman P. D. Tozzi G. -P.
Dello Russo N. Festou M. C.
[Atomic Deuterium Emission and the D/H Ratio in Comets](#) [#8216]

Crovisier J. Colom P. Biver N. Bockelée-Morvan D.
[Recent Observations of the OH 18-cm Lines in Comets with the Nançay Radio Telescope](#) [#8119]

Biver N. Wiesemeyer H. Paubert G. Crovisier J. Bockelée-Morvan D. Boissier J. Colom P.
[Radio-Wavelength Investigations of the Great Comet C/2006 P1 \(McNaught\) Near Perihelion](#) [#8247]

Voelzke M. R.
[CO⁺ and CN Gas Relations in Comet 1P/Halley](#) [#8032]

Anderson W. M. DiSanti M. A. Jr. Mumma M. J. Bonev B. P. Villaneuva G. L. Dello Russo N.
Magee-Sauer K. Gibb E. L.
[The Chemistry of Oxidized Carbon in Comet C/2002 T7 \(LINEAR\) Revealed Through Infrared Spectroscopy](#) [#8387]

Bodewits D. Villanueva G. L. Mumma M. J. Landsman W. Immler S. M. Porter F. S. Brown G. V.
[Swift Observations of Cometary X-Ray and UV Emission](#) [#8377]

Radeva Y. L. Bonev B. P. Mumma M. J. DiSanti M. A. Villanueva G. L. Magee-Sauer K.
Gibb E. L. Weaver H. A.
[The Depleted Organic Composition of Comet C/2000 WM₁ \(LINEAR\) as Revealed Through Infrared Spectroscopy](#) [#8294]

Magee-Sauer K. Mumma M. J. Bonev B. P. Radeva Y. L. DiSanti M. A. Villanueva G. L.
Dello Russo N. Gibb E. L. Anderson W. M.
[NH₃ Infrared Emission in Comets](#) [#8054]

Gibb E. L. Bonev B. P. Mumma M. J. DiSanti M. A. Villanueva G. Magee-Sauer K.
[Characterizing CH₄ Spin Temperature, Abundance, and CH₃D/CH₄ Ratio in Comets: The Case of C/2004 Q2](#) [#8314]

Rees A. Jones G. H. Balogh A.
[In Situ Ulysses Spacecraft Observations of Cometary Ion Tails' Magnetic Field Structure](#) [#8336]

Jones G. H. Witchalls T.
[Interplanetary Field Enhancements: The Solar wind Signatures of Cometary Dust Trails?](#) [#8366]

Kelley M. S. Woodward C. E. Harker D. E. Wooden D. H. Reach W. T.
Spitzer Comet Dust Survey Team
[Spitzer Spectra of Jupiter-Family Comets](#) [#8280]

Monday, July 14, 2008
POSTER SESSION I: SIZES AND ALBEDOS: SINGLES AND GROUPS
4:00 p.m. Laurel and Kent Rooms

Bernardi F. Tholen D. J. Micheli M.

[*\(25143\) Itokawa Absolute Magnitude and Slope Parameter G Calibration*](#) [#8338]

Rozitis B. Green S. F.

[*Applications of Thermophysical Modelling to Near Earth Asteroids*](#) [#8063]

Ryan E. L. Carey S. Mizuno D. Woodward C. E.

[*Expanding Asteroid Sizes and Albedos to the 1-km Threshold with Spitzer*](#) [#8170]

Carvano J. M.

[*On the Compositional Interpretation of the Geometric Albedo of Asteroids*](#) [#8344]

Yoshida F. Nakamura T.

[*An Insight into the Solar System History Through the Size Distribution of Jupiter's Trojans*](#) [#8182]

Haskell H. T. Larsen J. A. McMillan R. S. Spacewatch Team

[*The Size Distribution of Small Earth Approaching Asteroids*](#) [#8250]

Monday, July 14, 2008
POSTER SESSION I:
ASTEROID SHAPES AND PHOTOMETRY (WITH A TOUCH OF YORP)
4:00 p.m. Laurel and Kent Rooms

Howell E. S. Nolan M. C. Magri C.

[*What We Learn from Radar Shape Models*](#) [#8281]

Marciniak A. Michalowski T. Kwiatkowski T. Kaminski K.

[*Modelling Asteroids' Shapes Based on Their Lightcurves*](#) [#8129]

Rossi A. Marzari F. Scheeres D. J.

[*The Effect of YORP on the NEO Spin Rate Distribution*](#) [#8070]

Parviainen H. Muinonen K.

[*A Realistic Light-Scattering Model for Rough Particulate Surfaces*](#) [#8317]

Muinonen K.

[*Lightcurve Inversion Using Markov-Chain Monte-Carlo Methods*](#) [#8315]

Kwiatkowski T. Kryszczyńska A. Polinska M. Buckley D. O'Donoghue D. Charles P.
Crause L. Crawford S. Hashimoto Y. Kniazev A. Loaring N. Romero Colmenero E.
Sefako R. Still M. Vaisanen P.

[*Photometric Survey of the Smallest Near-Earth Asteroids with the SALT Telescope*](#) [#8333]

Kwiatkowski T. Kryszczyńska A. Polinska M. Buckley D. O'Donoghue D. Charles P.
Crause L. Crawford S. Hashimoto Y. Kniazev A. Loaring N. Romero Colmenero E.
Sefako R. Still M. Vaisanen P.

[*Photometry of Asteroid 2006 RH120 During Its Short Visit to a Geocentric Orbit*](#) [#8297]

Durech J. Vokrouhlicky D. Higgins D. Krugly Yu. Gaftonyuk N. Chiorny V.
Shevchenko V. Kaasalainen M.

[*Detection of the YORP Effect on Asteroid \(1620\) Geographos*](#) [#8392]

Monday, July 14, 2008
POSTER SESSION I: MODELING COMETS
4:00 p.m. Laurel and Kent Rooms

Jorda L. Crovisier J. Green D. W. E.

[*The Correlation Between Visual Magnitudes and Water Production Rates*](#) [#8046]

Filonenko V. S. Churyumov K. I. Chubko L. S.

[*Solar Activity Influence Upon the Photometrical Evolution of Comets: New Phenomena*](#) [#8196]

Harris W. M. Morgenthaler J. P.

[*Interacting Gas Flows in Split Comets: A Re-Evaluation of the Perigee Outburst of C/1996B2 \(Hyakutake\)*](#) [#8383]

Kawakita H. Dello Russo N. Kobayashi H.

[*Revised Water Hot-Band Emission Model in Comets*](#) [#8104]

Rousselot P. Jehin E. Manfroid J. Hutsemékers D.

[*A Fluorescence Model for \$^{12}\text{C}^{13}\text{C}\$ in Comets*](#) [#8142]

Guirado D. Moreno F.

[*Monte Carlo Modeling of Radiative Transfer in Comets: A Search for Mechanisms Giving Circular Polarization.*](#) [#8175]

Boissier J. Bockelée-Morvan D. Crifo J.-F. Rodionov A. V.

[*Using Hydrodynamical Modeling of the CO Coma of Comet Hale-Bopp to Interpret IRAM Plateau de Bure Observations.*](#) [#8079]

Knight M. M. A'Hearn M. F. Biesecker D. A. Faury G. Hamilton D. P. Lamy P. Llebaria A.

[*Phase Angle Effects on Sungrazing Comets Observed by SOHO*](#) [#8143]

Ho T. M. Thomas N. Bertini I. Bonev T. Combi M. Tenishev V.

[*Modeling the Dust Coma and Tail of Comet 19P/Borrelly Observed from Ground During the Deep Space 1 Encounter*](#) [#8236]

González M. Gutiérrez P. J. Lara L. M. Rodrigo R.

[*Effect of the Net Energy Released in Crystallization in Cometary Models*](#) [#8188]

Rosenberg E. D. Prialnik D.

[*Dust Mantle Formation and Thermal Evolution of Comet Nuclei Using a 3-D Numerical Model*](#) [#8083]

Zakharov V. V. Crifo J. F. Lukianov G. A. Rodionov A. V.

[*Monte-Carlo Modelling of the Circumnuclear Dust Coma: Benchmark Aspherical-Homogeneous and Spherical-Inhomogeneous Nuclei*](#) [#8148]

Monday, July 14, 2008
POSTER SESSION I: BINARY AND MULTIPLE SYSTEMS
4:00 p.m. Laurel and Kent Rooms

Kern S. D. Noll K. S.

[*Investigating the Tidal Evolution of Transneptunian Binaries with Variability Observations*](#) [#8332]

Noll K. S. Grundy W. M. Kern S. D. Barker E. A.

[*The Relative Sizes of Transneptunian Binaries: Differences Between Dynamical Classes?*](#) [#8298]

Marchis F. Baek M. Emery J. P. Michalowski T. Pollock J. Berthier J. Descamps P.
Macomber B. Velichko F.

[*Survey of Binary Asteroid Systems with Spitzer/IRS*](#) [#8171]

Polinska M. Bartzak P. Michalowski T. Marchis F. Pollock J. Colas F. Lecacheux J. Baek M.
Macomber B. Wong M. H. Reichart D. E. Ivarsen K. M. Crain J. A. Nysewander M. C. Lacluyze A. P.
Haislip J. B. Harvey J. S. Ribas F. B. Assafin M. Camarg J. I. B. Vieira Martins R.

[*CCD Observations and Modeling of 4492 Debussy Eclipsing Asteroid*](#) [#8134]

Taylor P. A. Margot J. L. Nolan M. C. Benner L. A. M. Ostro S. J. Giorgini J. D. Magri C.

[*The Shape, Mutual Orbit, and Tidal Evolution of Binary Near-Earth Asteroid 2004 DC*](#) [#8322]

Gorkavyi N. N.

[*Regular Mechanism of the Formation of Asteroid Satellites*](#) [#8357]

Reddy V. Gaffey M. J. Schaal M. Takir D.

[*Physical Characterization of First Triplet Near-Earth Asteroid \(153591\) 2001 SN²⁶³*](#) [#8244]

Monday, July 14, 2008
POSTER SESSION I:
COLLISION AND COLLISIONAL EVOLUTION: EXPERIMENTS AND MODELING
4:00 p.m. Laurel and Kent Rooms

Hermalyn B. Schultz P. H. Anderson J. L. B. Heineck J. T.
[*Time-Resolved Ejecta Velocity Distribution in Oblique Impacts*](#) [#8363]

Clark B. E. Ockert-Bell M. E. Cintala M. J.
[*Effects of Impact on South African Gabbro*](#) [#8304]

Friedrich J. M. Wignarajah D. P. Chaudhary S. Rivers M. L. Nehru C. E. Ebel D. S.
[*Dynamic Compaction of Asteroids: Impact-induced Preferred 3D Orientation of Metal Grains in L Chondrites*](#) [#8242]

Richardson D. C. Michel P. Walsh K. J.
[*Modeling Strength in Gravitational Aggregates*](#) [#8279]

Turrini D. Coradini A. De Sanctis M. C. Magni G.
[*Ceres Cratering as Record of Primordial Bombardment*](#) [#8123]

Benavidez P. G. Campo Bagatin A.
[*How Did Initial Conditions Affect the Collisional Evolution of TNOs Populations?*](#) [#8118]

Lederer S. M. Cintala M. J. Olney R. D. Nakamura-Messenger K. Keller L. P. Zolensky M. E.
[*Impact Processing of Refractory Components Found in Comet Dust*](#) [#8358]

Foster N. J. Burchell M. J. Kearsley A. T. Creighton J. A. Cole M. J.
[*Identification of Mineral Impactors in Hypervelocity Impact Craters in Stardust Grade Aluminium Foils by Raman Spectroscopy of Residues.*](#) [#8207]

Tuesday, July 15, 2008
SMALL BODIES: THE STARTING BLOCKS
8:00 a.m. Harborside D/E

Chairs: Jessica Sunshine
Andrew Rivkin

- 8:00 a.m. Levison H. F. * Bottke W. F. Nesvorný D. Morbidelli A. Gounelle M.
[*Capturing Comets in the Outer Asteroid Belt During the Late Heavy Bombardment*](#) [#8156]
- 8:15 a.m. Bottke W. F. * Levison H. F. Nesvorný D. Morbidelli A. Gounelle M.
[*The Collisional Evolution of Objects Captured in the Outer Asteroid Belt During the Late Heavy Bombardment*](#) [#8096]
- 8:30 a.m. McKinnon W. B. *
[*Could Ceres be a Refugee from the Kuiper Belt?*](#) [#8389]
- 8:45 a.m. Sunshine J. M. * Connolly H. C. Jr. McCoy T. J. Bus S. J. La Croix L. M.
[*Asteroids Enriched in Refractory Inclusions: Evidence of Accretion Prior to the Injection of Radiogenic Aluminum into the Solar System*](#) [#8164]
- 9:00 a.m. Wooden D. H. *
[*Puzzling Out Cometary Mg-Poor Silicates, Phyllosilicates, and Carbonates to be Pre-Accretional Grains that Formed in the Nebula Under Varying Redox Conditions*](#) [#8382]
- 9:15 a.m. Consolmagno G. J. * Britt D. T.
[*Asteroids and the Stratigraphic Sequence of the Solar Nebula*](#) [#8180]
- 9:30 a.m. Morbidelli A. * Nesvorný D. Bottke W. F. Levison H. F.
[*Formation of Planetesimals by Gravitational Instability in the Disk's Turbulent Structures: Evidence from Asteroid Belt Constraints*](#) [#8042]
- 9:45 a.m. Boney B. P. * Mumma M. J. Radeva Y. L. DiSanti M. A. Villanueva G. L.
[*Spin Temperature of H₂O in Comets — A Cosmogonic Indicator?*](#) [#8312]
- 10:00 a.m. BREAK

Tuesday, July 15, 2008
LIGHTCURVES AND PHOTOMETRY
10:30 a.m. Harborside D/E

Chairs: Rene Duffard
Simon Green

- 10:30 a.m. Statler T. S. * Cotto-Figueroa D. Riethmiller D.
[*The Rotation Rate Distribution of Small Near-Earth Objects*](#) [#8359]
- 10:45 a.m. Muinonen K. * Cellino A. Belskaya I. Delbò M. Lvasseur-Regourd A.-C. Tedesco E. F.
[*Inversion of Asteroid Phase Curves for Empirical Magnitude and Polarization Systems*](#) [#8263]
- 11:00 a.m. Shevchenko V. G. * Belskaya I. N. Tereschenko I. A.
[*Opposition Effect of Low Albedo Asteroids*](#) [#8105]
- 11:15 a.m. Masiero J. * Jedicke R. Pravec P. Gwyn S. Denneau L. Larsen J.
[*Results from the Thousand Asteroid Light Curve Survey*](#) [#8058]
- 11:30 a.m. Li J.-Y. * A'Hearn M. F. Farnham T. L. McFadden L. A.
[*Photometric Analysis of the Nucleus of Comet 81P/Wild 2 from Stardust NAVCAM Data*](#) [#8290]
- 11:45 a.m. Domingue D. L. * Vilas F. Choo T.
[*Impact of Photometric Variability on Spectral Interpretations over the Surface of Itokawa*](#) [#8306]
- 12:00 p.m. LUNCH

Tuesday, July 15, 2008
FAMILY MATTERS
1:30 p.m. Harborside D

Chairs: Thais Mothé Diniz
Lucy McFadden

- 1:30 p.m. Bus S. J. *
[Identification of Spectro-Dynamical Asteroid Families](#) [#8320]
- 1:45 p.m. Lazzaro D. * Carvano J. M. Michtchenko T. Carruba V. Hasselman P. H. Mothé-Diniz T.
[Baptistina: A Stange Family in the Inner Belt](#) [#8313]
- 2:00 p.m. Reddy V. * Kelley M. S. Emery J. P. Gaffey M. J. Bottke W. F. Nesvorný D. Schaal M.
Cramer A. Takir D.
[Composition of 298 Baptistina: Implications for K-T Impactor Link](#) [#8243]
- 2:15 p.m. Vernazza P. * Binzel R. P. Rossi A. Birlan M. Fornasier S. Fulchignoni M. Renner S.
[Physical Characterization of Very Young Asteroid Families](#) [#8044]
- 2:30 p.m. Espy A. J. * Dermott S. F. Kehoe T. J. J. Jayaraman S.
[A Young, Forming Zodiacal Cloud Dust Band; Observations and Dynamical Model](#) [#8348]
- 2:45 p.m. Mothé-Diniz T. * Nesvorný D.
[Spectroscopic Study of the D-Type\(?\) Tirela Family](#) [#8031]

Tuesday, July 15, 2008
COMETS: OBSERVATIONS FROM SPACE
3:00 p.m. Harborside D

Chairs: Thais Mothe Diniz
Lucy McFadden

- 3:00 p.m. Jones G. H. * Morrill J. S. Battams K. Owens M. J. Howard R. A.
Stenborg G. A. Lisse C. M.
[Comet C/2006 P1 \(McNaught\): Observations of Dust and Neutral Species by the STEREO and SOHO Spacecraft](#) [#8327]
- 3:15 p.m. Woodward C. E. * Kelley M. S. Pittichova J. Spitzer Comet Survey Team
[Spitzer Imaging of Comets: Spatially Extended CO+CO₂ Emission and Dust Trails](#) [#8013]
- 3:30 p.m. Fernández Y. R. * Kelley M. S. Lamy P. L. Toth I. Groussin O. A'Hearn M. F. Bauer J. M.
Campins H. Fitzsimmons A. Licandro J. Lisse C. M. Lowry S. C. Meech K. J. Pittichová J.
Reach W. T. Snodgrass C. Weaver H. A.
[Results from SEPPCoN, A Survey of Ensemble Physical Properties of Cometary Nuclei](#) [#8307]
- 3:45 p.m. BREAK

Tuesday, July 15, 2008
METEORS II: FOCUS ON THE CARANCAS IMPACT OF 2007
1:30 p.m. Harborside E

Chairs: Gonzalo Tancredi
Peter Schultz

- 1:30 p.m. Campbell-Brown M. D. * Wiegert P.
[Seasonal Variation of the Radiant Distribution of Sporadic Meteoroids](#) [#8139]
- 1:45 p.m. Kartashova A. P. * Bagrov A. V. Bolgova G. T. Leonov V. A. Sorokin N. A.
[On the Origin of Wide Meteoroid Streams Produced by Step-by-Step Comet Disaster](#) [#8115]
- 2:00 p.m. Tancredi G. * Ishitsuka J. Schultz P. Harris R. S. Brown P. Revelle D. Antier K.
Le Pichon A. Rosales D. Vidal E. Pavel D. Dalmau A. Benavente S. Miranda P.
Pereira G. Varela M. E. Sánchez L.
[The Carancas Crater and Meteorite Fall: The First Recorded Impact on Earth](#) [#8260]
- 2:15 p.m. ReVelle D. O. * Brown P. G. Edwards W. N. Tancredi G.
[Modeling the Entry Dynamics, Line Source Wave Normal Paths and Atmospheric Pressure Wave Signatures from the Carancas Meteorite Fall](#) [#8056]
- 2:30 p.m. Brown P. G. * Edwards W. N. Le Pichon A. Antier K. ReVelle D. O.
Tancredi G. Arrowsmith S.
[Instrumental Observations of the Fireball and Crater Formation Associated with the Carancas Meteorite Fall](#) [#8097]
- 2:45 p.m. Harris R. S. * Schultz P. H. Tancredi G. Ishitsuka J.
[Petrology of Ejecta from the Caranacas \(Peru\) Crater: Insights into the Dynamics of an "Unusual" Impact Event](#) [#8302]
- 3:00 p.m. Schultz P. H. *
["Needle Model" for Surviving Entry: Implications of the Carancas Impact](#) [#8342]
- 3:15 p.m. Borovička J. Spurný P.
[The Carancas Meteorite Impact — Encounter with a Monolithic Meteoroid](#) [#8212]
- 3:45 p.m. BREAK

Tuesday, July 15, 2008
COMET SEE: COMME CA
4:00 p.m. Harborside D

Chairs: Erika Gibb
Karen Magee-Sauer

- 4:00 p.m. Kelley M. S. * Fernández Y. R. A'Hearn M. F. Bauer J. Campins H. Fitzsimmons A. Groussin O. Lamy P. L. Licandro J. Lisse C. M. Lowry S. C. Meech K. J. Pittichová J. Reach W. T. Snodgrass C. Toth I. Weaver H. A.
[*Comet Dust and Activity in the SEPPCoN Survey*](#) [#8272]
- 4:15 p.m. Agarwal J. * Mueller M. Sykes M. V. Reach W. T. Boehnhardt H. Gruen E.
[*The Dust Trail of Comet 67P/Churyumov-Gerasimenko Near Aphelion*](#) [#8222]
- 4:30 p.m. A'Hearn M. F. * King A. Kolokolova L.
[*Optical Depth and Albedo of the Deep Impact Ejecta in the First Minutes*](#) [#8094]
- 4:45 p.m. Ipatov S. I. * A'Hearn M. F.
[*Velocities and Relative Amounts of Material Ejected After the Collision of DI Impactor with Comet 9P/Tempel 1*](#) [#8102]
- 5:00 p.m. Jackson W. M. * Yang X. Cochran A. L.
[*Modeling the Temporal Response of the Emissions from Comet 9P/Tempel 1 After Deep Impact Observed Using the Keck Telescope and the HIRES Instrument*](#) [#8060]
- 5:15 p.m. Boehnhardt H. * Tozzi G. P. Bagnulo S. Muinonen K. Nathues A. Kolokolova L.
[*Imaging and Polarimetry of the Nucleus of Comet 2P/Encke*](#) [#8005]
- 5:30 p.m. Kolokolova L. * Kiselev N. Rosenbush V. Kimura H.
[*Spectral Dependence of Polarization in Comets: Recent Observations and Interpretation*](#) [#8240]
- 5:45 p.m. Feldman P. D. * Lupu R. E. McCandliss S. R. Weaver H. A.
[*The Far-Ultraviolet Spectral Signatures of Formaldehyde and Carbon Dioxide in Comets*](#) [#8137]
- 6:00 p.m. Jehin E. * Manfroid J. Hutsemékers D. Cochran A. Zucconi J.-M. Schulz R. Arpigny C.
[*Carbon and Nitrogen Isotopic Ratios in Comets*](#) [#8339]
- 6:15 p.m. DiSanti M. A. * Mumma M. J. Bonev B. P. Villanueva G. L. Radeva Y. L. Anderson W. M. Magee-Sauer K. Gibb E. L.
[*A Comparison of Oxidized Carbon Abundances Among Comets*](#) [#8275]

Tuesday, July 15, 2008
WHEN (SMALL) WORLDS COLLIDE
4:00 p.m. Harborside E

Chairs: Adriano Campo Bagatin
Derek Richardson

- 4:00 p.m. Michel P. Jutzi M. Richardson D. C. Benz W.
[*Catastrophic Disruption of Asteroids: Latest Simulations Including Porosity Effects, Explicit Formation of Spinning Aggregates and Their Implications*](#) [#8072]
- 4:20 p.m. Jutzi M. Benz W. Michel P.
[*Simulations of High-Velocity Impacts on Porous Targets: A Successful Confrontation with Laboratory Experiments*](#) [#8133]
- 4:35 p.m. Fujii Y. Nakamura A. M.
[*Compaction of Small Porous Bodies at Low Velocity Impact*](#) [#8184]
- 4:50 p.m. Asphaug E.
[*Critical Crater Diameter of Minor Bodies*](#) [#8004]
- 5:05 p.m. Kimberly J. Ramesh K. T. Barnouin-Jha O. S. Ernst C. M. Swaminathan P. K.
[*Advances in Experimental Fracture Mechanics: Applications to Fragmentation and Cratering*](#) [#8296]
- 5:20 p.m. Setoh M. Yamashita Y. Nakamura A. M. Michel P.
[*Impact Experiments of Rubble Pile*](#) [#8039]
- 5:35 p.m. Okamoto C. Arakawa M.
[*Experimental Study on Collisional Disruption of Gypsum Sphere: Implication for Formation of Rubble Pile Bodies*](#) [#8249]
- 5:50 p.m. Campo Bagatin A. Davo M. J. Richardson D. C.
[*Collisions on Gravitational Aggregates: Dependence on Size and Texture*](#) [#8192]
- 6:05 p.m. O'Brien D. P. Morbidelli A.
[*The Collisional Evolution of Trojan Asteroids — A Possible Origin of the L4-L5 Asymmetry*](#) [#8367]
- 6:20 p.m. Leliwa-Kopystynski J. Burchell M. J. Włodarczyk I.
[*Impact Origin of Asteroid Families*](#) [#8050]

Wednesday, July 16, 2008
INTERRELATIONS I: MAIN BELT COMETS AND OTHER COUSINS
8:00 a.m. Harborside D/E

Chairs: Jorge M. Carvano
Clark Chapman

- 8:00 a.m. Jewitt D. *
[*Ice Nearby — The Main Belt Comets*](#) [#8167]
- 8:20 a.m. Haghighipour N. *
[*Dynamical Constraints on the Origin and Activation Mechanism of Main Belt Comets*](#) [#8287]
- 8:35 a.m. Hsieh H. H. * Jewitt D. Fernández Y. R.
[*Albedos of Main-Belt Comet Nuclei and Kilometer-Scale Themis Asteroids*](#) [#8200]
- 8:50 a.m. Dotto E. *
[*The Trojans in the Solar System*](#) [#8112]
- 9:10 a.m. Cruikshank D. P. * Clark R. N. Brown R. H. Buratti B. J. Nicholson P. D. Meyer A.
Dalton J. B. Dalle Ore C. M. Pendleton Y. J. VIMS Team
[*Organic Solids on Saturn's Satellites*](#) [#8256]
- 9:25 a.m. Borovička J. * Čapek D. Koten P. Spurný P. Shrbený L. Štork R.
[*Structure and Composition of Geminid Meteoroids and Implications for the Nature of Phaethon*](#) [#8211]
- 9:50 a.m. Rivkin A. S. * Emery J. P.
[*Water Ice on 24 Themis?*](#) [#8099]
- 10:05 a.m. BREAK

Wednesday, July 16, 2008
THE OUTER LIMITS
10:30 a.m. Harborside D/E

Chairs: James M. Bauer
William Bottke

- 10:30 a.m. Stern S. A. *
[*Interstellar Comets: How Many, What Value, How to Detect Them?*](#) [#8016]
- 10:50 a.m. Rickman H. Fouchard M. * Froeschlé Ch. Valsecchi G. B.
[*Injection of Oort Cloud Comets: The Fundamental Role of Stellar Perturbations*](#) [#8077]
- 11:05 a.m. Protopapa S. * Boehnhardt H. Herbst T. M. Cruikshank D. P. Grundy W. M. Merlin F. Olkin C. B.
[*Spectra of Pluto and Charon Resolved up to 5 \$\mu\$ m: Implications for Surface Properties*](#) [#8150]
- 11:20 a.m. Merlin F. * Alvarez-Candal A. Delsanti A. Quirico E. Schmitt B. Fornasier S. Barucci M. A. DeMeo F. E. de Bergh C. Doressoundiram A.
[*Icy Surface Properties of the Dwarf Planet Eris*](#) [#8141]
- 11:35 a.m. Lykawka P. S. * Mukai T.
[*Origin of the Edgeworth-Kuiper Belt Architecture: Evidence of Dynamical Sculpting by an Outer Planet*](#) [#8231]
- 11:50 a.m. Lacerda P. * Jewitt D. Peixinho N.
[*A Dark, Red Spot on 2003 EL61*](#) [#8007]
- 12:05 p.m. BREAK

Wednesday, July 16, 2008
MISSIONS: RECENT, EN ROUTE, PLANNED, AND HOPED-FOR
1:30 p.m. Harborside D/E

Chairs: Lori Feaga
Detlef Koschny

- 1:30 p.m. Yoshikawa M. * Fujiwara A. Kawaguchi J. Yeomans D. K. Saito J. Abe M. Okada T. Mukai T. Hayabusa Science Team
[*The Nature of Itokawa Revealed by Hayabusa*](#) [#8218]
- 1:50 p.m. Olkin C. B. * Cook J. C. Lovering J. Lunsford A. New Horizons Science Team
[*New Horizons: Past and Future Flybys*](#) [#8352]
- 2:05 p.m. Sykes M. V. * Russell C. T. Raymond C. Capaccioni F. Capria M. T. Christensen U. Coradini A. De Sanctis M. C. Feldman W. Jaumann R. Keller H. U. Konopliv A. McCord T. B. McFadden L.-A. McSween H. Mottola S. Neukum G. Pieters C. Prettyman T. Smith D. Williams B. Zuber M.
[*The Dawn Mission to Vesta and Ceres*](#) [#8335]
- 2:20 p.m. Veverka J. * Klaasen K. Duxbury T. Wolf A. Chevront A.
[*The Stardust NEt Mission to Tempel 1*](#) [#8053]
- 2:35 p.m. Lamy P. L. * Barucci A. Fornasier S. Groussin O. Jorda L. Kaasalainen M. Lowry S. Toth I.
[*A Portrait of Asteroid 2867 Steins from Visible and Infrared Observations with Ground- and Space-Based Telescopes*](#) [#8163]
- 2:50 p.m. Mouret S. * Mignard F. Hestroffer D.
[*Asteroid Mass Determination with the Gaia Mission*](#) [#8251]
- 3:05 p.m. Koschny D. * Barucci A. Yoshikawa M. Bönhardt H. Brucato J. Coradini M. Dotto E. Franchi I. Green S. Josset J.-L. Kawaguchi J. Michel P. Muinonen K. Oberst J. Yano H. Binzel R. Agnolon D. Romstedt J.
[*Marco Polo — A mission to Return a Sample from a Near-Earth Object*](#) [#8227]
- 3:20 p.m. Abell P. A. * Korsmeyer D. J. Landis R. R. Jones T. Adamo D. Morrison D. Lemke L. Gonzales A. Gershman B. Sweetser T. Johnson L.
[*Scientific Exploration of Near-Earth Objects via the Orion Crew Exploration Vehicle*](#) [#8325]
- 3:35 p.m. BREAK

Wednesday, July 16, 2008
POSTER SESSION II: FUTURE MISSION INSTRUMENTS AND TECHNIQUES
4:00 p.m. Laurel and Kent Rooms

Chabot N. L. Lees W. J.

[Assessing an Asteroid Sample Return Collection Mechanism](#) [#8093]

Gorkavyi I. N.

[3D Laser Scanning for Asteroids and Comets](#) [#8277]

Takagi Y.

[The Drop Tower Experiments as a Tool for Asteroid Studies](#) [#8230]

Ammannito E. Coradini A. De Sanctis M. C. Piccioni G.

[Imaging Spectroscopy in Lab: A Tool Supporting the Interpretation of Remotely Sensed Data by Dawn Mission.](#) [#8295]

Hibbitts C. A.

[On the Spectroscopic Detection of Volatiles and Organics on Asteroids and Other Small Bodies](#) [#8353]

Deshpande M. D. Smith D. Garvin J. Racette P. Bradely D.

[Low Frequency, High Resolution Inverse Synthetic Aperture Radar \(ISAR\) for Imaging Interior Geology of Asteroids/Comets](#) [#8018]

Paton M. D. Green S. F.

[Measuring the Properties of Asteroid Regolith Subsurface Particles Using a Penetrometer](#) [#8113]

Wednesday, July 16, 2008
POSTER SESSION II:
UPCOMING MISSIONS AND MISSION SUPPORT OBSERVATIONS
4:00 p.m. Laurel and Kent Rooms

Binzel R. P. Thomas C. A. Tokunaga A. Bus S. J. DeMeo F. E. Rivkin A. S. Burbine T. H.
Vernazza P. Birlan M. Storm S. P. Springmann A. Masterman M.
[*Spectral Properties of Near-Earth Object Mission Targets*](#) [#8228]

A'Hearn M. F. Sunshine J. M. McFadden L. A. Wellnitz D. D. Feaga L. M. Farnham T. L. Li J.-Y.
Belton M. J. S. Thomas P. C. Veverka J. Klaasen K. P.
[*EPOXI's Mission to Comet 103P/Hartley 2*](#) [#8165]

Economou T. E.
[*The Dust Flux Monitor Instrument for the Stardust-NExT Mission*](#) [#8168]

Abe M. Kawakami K. Hasegawa S. Kuroda D. Yoshikawa M. Kasuga T. Kitazato K. Sarugaku Y.
Kinoshita D. Miyasaka S. Urakawa S. Okumura S. Takagi Y. Takato N. Fujjyoshi T. Terada H.
Wada T. Ita Y. Vilas F. Weissman P. R. Choi Y.-J. Larson S. Bus S. J. Tokunaga A. Muller T. G.
[*Ground-based Observational Campaign for 162173 1999JU3, the Target Asteroid of Sample Return Mission, Hayabusa-2*](#) [#8069]

Hilton J. L.
[*Prospects for Improving the Masses of \(1\) Ceres and \(4\) Vesta Prior to Dawn's Arrival at These Minor Planets*](#) [#8169]

Jenniskens P. Hatton J.
[*An Airborne Observing Campaign to Monitor the Fragmenting Fireball Re-entry of ATV-1 "Jules Verne" in August 2008*](#) [#8202]

Meech K. J. Pittichova J. Belton M. J. S.
[*The Earth-Based Observing Plan for the Stardust-NExT Mission*](#) [#8346]

Wednesday, July 16, 2008
POSTER SESSION II:
ASTEROID SPECTROSCOPY: COMPOSITIONS AND SPACE WEATHERING
4:00 p.m. Laurel and Kent Rooms

Domokos A. Wiegert P.

[*Estimating the Degree of Space Weathering on Koronis Family Asteroids: Preliminary Results of ECAS Observations*](#) [#8266]

Kitazato K. Abe M. Clark B. E. Abe S. Takagi Y. Hiroi T. Abell P. Lederer S. M. Vilas F.

[*The Effects of Space Weathering and Particle Size Variations on Itokawa from Hayabusa Near-Infrared Spectroscopy*](#) [#8208]

Chapman C. R. Enke B. Merline W. J. Nesvorny D. Tamblyn P. Young E. F.

[*Reflectance Spectra of Very Young Asteroid Families*](#) [#8391]

Burbine T. H. Buchanan P. C. Binzel R. P.

[*Determining the Pyroxene Mineralogies of Near-Earth, Middle-Belt, and Outer-Belt Vestoids.*](#) [#8274]

Gaffey M. J.

[*Interpreting Asteroid Spectra — Avoiding the Three “Great Mistakes”*](#) [#8162]

Campins H. Fernández Y. Kelley M. Licandro J. Hargrove K. de León J.

Pinilla-Alonso N. Morbidelli A.

[*Low Perihelion Near-Earth Asteroids*](#) [#8291]

Gietzen K. M. Lacy C. H. S. Ostrowski D. R. Sears D. W. G.

[*A Comparison of the Class Distribution of Asteroids in the Main Belt and Near-Earth Vicinity*](#) [#8323]

Busarev V. V.

[*Spectral Signs of Carbonaceous Chondritic Material on \(21\) Lutetia*](#) [#8010]

Wednesday, July 16, 2008
POSTER SESSION II: NEAR-EARTH AND MAIN-BELT SURVEYS
4:00 p.m. Laurel and Kent Rooms

Linfield R. VanCleve J. Reitsema H. J. Arentz R.
[Searching for Near Earth Objects: An IR Telescope in a Venus-like Orbit](#) [#8270]

Vereš P. Jedicke R. Denneau L. Chesley S. Pan-STARRS Team
[Detection of Earth Impacting Asteroids with the Next Generation All-Sky Surveys](#) [#8061]

Tichá J. Tichý M. Kočer M. Honková M.
[KLENOT Project 2002-2008](#) [#8066]

Svoreň J. Husárik M. Ambróz J. Drbohlav J. Medek J.
[New Semi-Automated Photometric Telescope at the Skalnaté Pleso Observatory](#) [#8073]

Mottola S. Börner A. Grundmann J. T. Hahn G. J. Kazeminejad B. Kührt E. Michaelis H.
Montenegro S. Schmitz N. Spietz P.
[AsteroidFinder: A Space-Based Search for IEOs](#) [#8140]

Moon H. Byun Y. Raymond S. N. Spahr T.
[Realistic Survey Simulations for Kilometer Class Near Earth Objects](#) [#8214]

Jedicke R.
[Pan-STARRS: First Solar System Results](#) [#8301]

Drentschew M. Hahn G. J. Kührt E. Mottola S. Dillmann R.
[Modeling of the Expected Performance for the German AsteroidFinder Mission](#) [#8125]

Zhao H. B. Yao J. S. Lu H. Li G. Y. Ma Y. H. Yao D. Z.
[The New NEO Survey Project — Chinese Near Earth Object Survey \(CNEOS\)](#) [#8098]

Terai T. Itoh Y.
[A Wide-Field Survey for Small Main-Belt Asteroids in High Inclination](#) [#8215]

Wednesday, July 16, 2008
POSTER SESSION II: DYNAMICS
4:00 p.m. Laurel and Kent Rooms

- Kehoe T. J. J. Dermott S. F. Espy A. J.
[*Dynamics of Asteroidal Dust Particles in the Inner Solar System*](#) [#8356]
- Berthier J. Hestroffer D. Carry B. Durech J. Tanga P. Delbò M. Vachier F.
[*A Service of Position and Physical Ephemerides Computation Dedicated to the Small Bodies of the Solar System*](#) [#8374]
- Hestroffer D. Mouret S. Mignard F. Tanga P.
[*Local Test of GR with Asteroids — A Gaia Perspective*](#) [#8324]
- Wajer P.
[*Long-Term Evolution of the Earth's Co-Orbital Asteroids*](#) [#8122]
- Włodarczyk I. Leliwa-Kopystynski J.
[*The Evolution of the Eunomia Family of Asteroids*](#) [#8088]
- Oszkiewicz D. A. Muinonen K. Mouret S. Granvik M. Virtanen J.
[*Markov-Chain Monte-Carlo Methods for Asteroid Orbit Computation*](#) [#8221]
- Granvik M. Virtanen J. Muinonen K.
[*OpenOrb: Open-Source Asteroid-Orbit-Computation Software Including Statistical Orbital Ranging*](#) [#8206]
- Gallardo T.
[*Dynamics of the Mars 1:2 Resonant Population*](#) [#8078]
- Jiménez-Fernández F. J. Molina A. Moreno F.
[*Pseudostable Orbits of Dust Particles Around Cometary Nuclei*](#) [#8075]
- Solovaya N. A. Pittich E. M.
[*On Similar Dynamical Behaviour of SOHO Comets and High Inclination Asteroids*](#) [#8052]
- Pittich E. M. Solovaya N. A.
[*Possible Sources of Planetary Crossers*](#) [#8051]
- Shevchenko I. I.
[*On Dynamical Chaos Due to Three-Body Resonances in the Motion of Asteroids*](#) [#8038]
- Ipatov S. I.
[*Probabilities of Collisions of Migrating Small Bodies and Dust Particles with Planets*](#) [#8103]
- Kovalenko N. S. Babenko Yu. G. Churyumov K. I.
[*Centaur Population: Orbital Evolution Modelling*](#) [#8390]
- Lykawka P. S. Mukai T.
[*Long-Term Dynamical Evolution of Trans-Neptunian Objects in the Scattered Disk*](#) [#8234]
- Ito T. Malhotra R.
[*Asymmetric Impacts of Near-Earth Asteroids on the Moon*](#) [#8183]

Lykawka P. S. Horner J. A. Mukai T. Jones B. W.
[*Origin and Dynamical Evolution of Neptune Trojans*](#) [#8233]

Tiwari R. K. Dr.
[*Bianchi Type-V Models in Self-Creation Cosmology with Constant Deceleration Parameter*](#) [#8191]

Wednesday, July 16, 2008
POSTER SESSION II: ROSETTA
4:00 p.m. Laurel and Kent Rooms

Schulz R. Ho T. -M.

[*Rosetta's Encounter with Asteroid 2867 Steins in September 2008*](#) [#8109]

Lamy P. L. Barucci A. Fornassier S. Faury G. Groussin O. Kaasalainen M. Jorda L. Mottola S. Toth I.

[*A Portrait of Asteroid 21 Lutetia from Visible and Infrared Observations with Ground- and Space-Based Telescopes*](#) [#8245]

Birlan M. Nedelcu D. A. Vernazza P. Barucci M. A. Binzel R. P. Fulchignoni M.

[*Spectral Properties of 2867 Steins and 21 Lutetia, the Rosetta Mission Targets*](#) [#8048]

Feaga L. M. A'Hearn M. F. Bertaux J. L. Feldman P. D. Parker J. Wm. Slater D. C. Steffl A. J. Stern S. A. Versteeg M. Weaver H. A.

[*Upcoming Far-Ultraviolet Observations of 2867 Steins and 67P/Churyumov-Gerasimenko with Rosetta Alice*](#) [#8237]

Lazzarin M. Marchi S. Moroz L. Magrin S.

[*Spectral Features of 21 Lutetia, Target of Rosetta Mission*](#) [#8111]

Spjuth S. Jorda L. Li J. Keller H. U. Kueppers M. Hviid S. Lamy P.

[*Determination of Photometric Properties of Asteroid Steins*](#) [#8082]

Tubiana C. Boehnhardt H. Drahus M. Barrera L. Ortiz J. L. Schwehm G. Schulz R. Stuewe J. Vincent J. B.

[*67P/Churyumov-Gerasimenko: The Rosetta Target Comet in the Aphelion Arc*](#) [#8047]

Zakharov V. V. Bockelée-Morvan D. Biver N. Crovisier J. Crifo J. F. Gulkis S. Rodionov A. V.

[*Numerical Simulations of Water Spectra Obtained with the Microwave Instrument for the Rosetta Orbiter \(MIRO\) from Comet 67P/Churyumov-Gerasimenko*](#) [#8144]

Wooden D. H. Kelley M. S. Woodward C. E. Harker D. E. Boehnhardt H. Tubiana C. Prialnik D.

[*Comet 67P/Churyumov-Gerasimenko: Nuclear Properties and Heliocentric-Distance Dependent Activity*](#) [#8380]

Wednesday, July 16, 2008
POSTER SESSION II: SMALL BODY GEOLOGY
4:00 p.m. Laurel and Kent Rooms

Meech K. J. Wilson L. Prialnik D.

[*Smooth Regions on Comet 9P/Tempel 1: Cryovolcanic Emplacement?*](#) [#8341]

Ernst C. M. Barnouin-Jha O. S.

[*Assessing the Role of Seismic Shaking on Crater Morphology for 433 Eros*](#) [#8238]

Gaskell R. W.

[*Eros: A Self-Guided Tour*](#) [#8176]

Marchi S. Mottola S. Cremonese G. Martellato E.

[*A New Model for Age Determination of Lunar Regions*](#) [#8089]

Wednesday, July 16, 2008
POSTER SESSION II:
TNOS AND CENTAURS: SURVEYS, COLORS, COMPOSITIONS, AND ACTIVITY
4:00 p.m. Laurel and Kent Rooms

DeMeo F. E. Fornasier S. Barucci M. A. Protopapa S. Perna D. Alvarez-Candal A. Delsanti A. Doressoundiram A. Merlin F. de Bergh C.
[Visible and Near-Infrared Colors of KBOs and Centaurs from the Second ESO Large Program](#) [#8189]

Choi Y. J. Weissman P. R.
[Two Years After Cometary Activity of Centaur \(60558\) 174P/Echeclus](#) [#8355]

Belskaya I. N. Bagnulo S. Barucci M. A. Muinonen K. Tozzi G. P. Fornasier S. Kolokolova L.
[Polarimetry of Transneptunian Objects and Centaurs with VLT](#) [#8172]

Delsanti A. Doressoundiram A. Peixinho N.
[A Canada-France-Hawaii Telescope Survey for Visible and Near-Infrared Colors of Kuiper Belt Objects and Centaurs](#) [#8136]

Ansbro E. Green S. F. Christou A. Murray J. B.
[An Outer Solar System High Ecliptic Survey](#) [#8087]

Müller T. G. Lellouch E. Bönhardt H. Stansberry J. Barucci A. Crovisier J. Delsanti A. Doressoundiram A. Dotto E. Duffard R. Fornasier S. Groussin O. Gutierrez P. J. Hainaut O. Harris A. Hartogh P. Hestroffer D. Horner J. Jewitt D. Kidger M. Kiss C. Lacerda P. Lara L. Lim T. Mueller M. Moreno R. Ortiz J.-L. Rengel M. Santos-Sanz P. Swinyard B. Thomas N. Trilling D.
[Herschel Open Time Key Programme: TNOs are Cool: A Survey of the Transneptunian Region](#) [#8080]

Tichý M. Tichá J. Kočer M. Honková M.
[TNO Precovery Survey Using the KLENOT Telescope Archive](#) [#8067]

Alvarez-Candal A. Fornasier S. Barucci M. A. de Bergh C. Merlin F.
[New ESO-Large Program on TNOs: First Visible Spectroscopic Results](#) [#8001]

Sarid G. Prialnik D.
[Methane and Ice Water Retention in Large KBOs](#) [#8254]

Wednesday, July 16, 2008
POSTER SESSION II: MISSION CONCEPTS
4:00 p.m. Laurel and Kent Rooms

Nathues A. Boehnhardt H. Harris A. W. Goetz W. Gritzner C. Jentsch C. Schmitz N. Schaeff S.
Weischede F. Wiegand A.

[ASTEX – An In-Situ Exploration Mission to Two Near-Earth-Asteroids](#) [#8076]

Benson S. W. Patterson M. J. Dankanich J. W.

[Small Body Exploration with Next Ion Propulsion](#) [#8385]

Perkinson M-C. Yazdi K. D'Arrigo P. Povoleri A. Kemble S. Sembely X. Bouilly J-M. Magnani P.
Re E. Agnolon D.

[System Design of a Near Earth Asteroid Sample Return Mission](#) [#8023]

Gold R. E. Rivkin A. S. Benson S. W. Emery J. P. Hibbitts C. A. Lisse C. M.

[Ilion: A Jovian Trojan Asteroid Orbiter and Lander Mission Concept](#) [#8127]

Clark B. C. Sunshine J. M. A'Hearn M. F. Cochran A. L. Farnham T. L. Harris W. M.
McCoy T. J. Veverka J.

[Comet Hopper: A Mission Concept for Exploring the Heterogeneity of Comets](#) [#8131]

Wolters S. D. Ball A. J. McBride N.

[Science Investigations and Payload for the Don Quijote Mission – Results of the Phase A Study](#) [#8241]

Asphaug E. Delory G. T. Korycansky D. Marchis F. de Pater I. Hines J.
Worden P. 2008 S4P Summer Students

[UARC/NASA Near Earth Object Small Spacecraft Summer Program](#) [#8386]

Wednesday, July 16, 2008
POSTER SESSION II: COMET TEMPEL 1 AND DEEP IMPACT
4:00 p.m. Laurel and Kent Rooms

Farnham T. L. Bastien F. A'Hearn M. F. Wellnitz D. D. Belton M. J. S.
[Improved Photometry of Comet Tempel 1 from the Deep Impact Observations](#) [#8179]

Wellnitz D. D. Deep Impact Team
[Visualizing the Nucleus of Comet 9P/Tempel 1 Using the Deep Impact Images](#) [#8362]

Feaga L. M. A'Hearn M. F. Sunshine J. M. Farnham T. L. Groussin O. Belton M. J. S.
[Compositional Comparison of Natural Outbursts from Comet 9P/Tempel 1](#) [#8300]

Corliss J. B. Mierkiewicz E. J. Roesler F. L. Oliverson R. J. Harris W. M.
[Was a Long-lived, High Velocity Gas Jet Produced by the Comet Tempel 1 Deep Impact Event: Evidence from High Spectral Resolution \[OI\] 630 nm Interference Spectra](#) [#8384]

Ho T. M. Knollenberg J. Boice D. C. Hoekzema N. Kuehrt E. Schulz R. Stuewe J. Thomas N.
[Comparing the Dust Emission in the Close Vicinity of Comets 1P/Halley, 19P/Borrelly, 81P/Wild2 and 9P/Tempel 1](#) [#8269]

Picazzio E. Almeida A. A. Churyumov K. I. Chubko L. S. Lukyanyk I. V. Kleshchonok V. V. Torres R. Escudero A.
[Exploration and Comparison of Spectra of Comets 9P/Tempel 1 and 37P/Forbes Observed on 3-5 July, 2005 at Observatório do Pico dos Dias](#) [#8268]

Wednesday, July 16, 2008
POSTER SESSION II: INTERRELATIONS
4:00 p.m. Laurel and Kent Rooms

Rousselot P. Mousis O. Dumas C. Jehin E. Manfroid J. Carry B. Zucconi J.-M.
[*A Search for Escaping Water from Ceres' Poles*](#) [#8337]

Ostrowski D. R. Sears D. W. G. Gietzen K. M. Lacy C. H. S.
[*A Study of Phyllosilicates as Possible Components of the Surface of C Asteroids*](#) [#8299]

Mautner M. N.
[*Meteorite Models of Astrochemistry and Astrobiology. 2. Soluble Carbon and Electrolytes in Carbonaceous Chondrites*](#) [#8020]

Mautner M. N.
[*Meteorite Models of Astrochemistry and Astrobiology. 1. Gas/Grain Interactions and Catalysis in the Solar Nebula*](#) [#8019]

Pittichová J. Meech K. J.
[*Photometry and Dust Modeling for Select Main-Belt Comets*](#) [#8092]

Tancredi G. Favre S.
[*Which are the Dwarfs in the Solar System?*](#) [#8261]

Shestopalov D. I. Shustarev P. N.
[*Studying Spectral Properties of Interstellar Dust and Meteorites, Main Belt Asteroids, and TNOs*](#) [#8037]

Sonnett S. Jedicke R. Masiero J. Kleyna J.
[*Upper Limits to Main Belt Comet Distributions Using the Thousand Asteroids Light Curve Survey*](#) [#8308]

Petit J.-M. Mousis O. Wurm G.
[*Photophoresis: Transporting Hot Minerals to Comets*](#) [#8364]

Van Flandern T.
[*The Nature of Comets: Big Surprises*](#) [#8012]

Shylaja B. S. Bhavani Prasad J. Santosh P. Prasanna Kumar C. R.
[*A Simple Classification Scheme for NEAs*](#) [#8062]

Thursday, July 17, 2008
STARDUST
8:00 a.m. Harborside D/E

Chairs: Michael Zolensky
Carolyn van der Bogert

- 8:00 a.m. Stroud R. M. * De Gregorio B. T. Bassim N. D. Cody G. D. Nittler L. R.
Zega T. J. Kilcoyne L. D.
[Coordinated Studies of Stardust Track and Crater Samples from Comet Wild2](#) [#8347]
- 8:20 a.m. Zolensky M. E. *
[What We Have Learned About the Mineralogy of Comet Wild 2 in Two Years](#) [#8155]
- 8:35 a.m. Kearsley A. T. * Burchell M. J. Hörz F. Graham G. A. Teslich N. Cole M. J.
[Stardust Foil Craters Reveal the Fine Structure of Dust from Comet Wild 2](#) [#8158]
- 8:50 a.m. Foster N. J. * Kearsley A. T. Burchell M. J. Wozniakiewicz P. J. Creighton J. A. Cole M. J.
[Analysis of Hydrous Phyllosilicates in Stardust Type B Track Analogues](#) [#8209]
- 9:05 a.m. van der Bogert C. H. * Stephan T. Jessberger E. K.
[Capture-Processing of Stardust Cometary Samples: Comparisons of Capture-Melted and Unmelted Particles](#) [#8257]
- 9:20 a.m. Westphal A. J. * Butterworth A. L. Fakra S. Gainsforth Z. Marcus M. A. Ogliore R.
[High Concentration of Sulfides in the Jupiter-family Comet Wild2](#) [#8350]
- 9:35 a.m. Burchell M. J. * Pushkin N. Kearsley A. T. Hörz F.
[Tracks in Stardust Cometary Aerogels: Cometary Particle Structure and Size Distribution](#) [#8126]
- 9:50 a.m. Brownlee D. E. * Tsou P. Joswiak D. Matrajt G. Bradley J.
[Analysis of Comet Particles Collected by the Stardust Mission, Findings Versus Expectations](#) [#8262]
- 10:10 a.m. BREAK

Thursday, July 17, 2008
BINARIES II: OBSERVATIONS
10:30 a.m. Harborside D/E

Chairs: Michael Nolan
William Merline

- 10:30 a.m. Nolan M. C. * Howell E. S. Benner L. A. M. Ostro S. J. Giorgini J. D. Busch M. W.
Carter L. M. Anderson R. F. Magri C. Campbell D. B. Margot J. L. Vervack R. J.
Shepard M. K.
[*Arecibo Radar Imaging of 2001 SN²⁶³: A Near-Earth Triple Asteroid System*](#) [#8258]
- 10:45 a.m. Margot J.-L. * Taylor P. Rojo P. Vesper G.
[*Discovery and Characterization of Binary Asteroids with Adaptive Optics*](#) [#8351]
- 11:00 a.m. Polishook D. * Brosch N. Kaspi S.
[*Simultaneous Spectroscopic and Photometric Observations of Binary Asteroids*](#) [#8132]
- 11:15 a.m. Merline W. J. * Conrad A. R. Drummond J. D. Carry B. Dumas C. Tamblyn P. M.
Chapman C. R. Owen W. M. Durda D. D. Campbell R. D. Goodrich R. W.
[*Discovery of an Extreme Mass-Ratio Satellite of \(41\) Daphne in a Close Orbit*](#) [#8370]
- 11:30 a.m. Tholen D. J. * Buie M. W. Grundy W. M.
[*Dynamical State of the Pluto System*](#) [#8226]
- 11:45 a.m. Petit J.-M. * Kavelaars J. J. Gladman B. J. Margot J.-L. Nicholson P. D. Jones R. L.
Parker J. Ashby M.
[*The Extreme KBO Binary 2001 QW₃₂₂*](#) [#8354]
- 12:00 p.m. LUNCH

Thursday, July 17, 2008
HOLMES: STUDIES IN SCARLET AND INFRARED AND RADIO...
1:30 p.m. Harborside D

Chairs: Nicolas Biver
Dominique Bockel -Morvan

- 1:30 p.m. Bockel -Morvan D. *
[Comet 17P/Holmes in Outburst](#) [#8185]
- 1:50 p.m. Yang B. * Jewitt D.
[Near Infrared Spectroscopy on the Outburst Comet 17P/Holmes](#) [#8011]
- 2:05 p.m. Capria M. T. De Sanctis M. C. * Cremonese G.
[High Resolution Spectroscopic Observation of Comet 17P/Holmes](#) [#8117]
- 2:20 p.m. Biver N. * Bockel -Morvan D. Wiesemeyer H. Crovisier J. Peng R. Lis D. C. Phillips T.
Boissier J. Colom P. Lellouch E. Moreno R.
[Composition and Outburst Follow-up Observations of Comet 17P/Holmes at the Nan ay, IRAM and CSO Radio Observatories](#) [#8146]
- 2:35 p.m. Stevenson R. * Kleyna J. Lacerda P. Jewitt D.
[Comet Holmes: Examining Four Months of Evolution Using Widefield Images](#) [#8210]
- 2:50 p.m. Snodgrass C. * Fitzsimmons A. Boehnhardt H. Lister T.
[The October 2007 Outburst of 17P/Holmes](#) [#8278]
- 3:05 p.m. Boissier J. * Bockel -Morvan D. Biver N. Crovisier J. Lellouch E. Moreno R.
[Interferometric Mapping of Dust Continuum, HCN and HNC 3-mm Emissions in Comet 17P/Holmes Using IRAM Plateau de Bure](#) [#8081]
- 3:20 p.m. BREAK

Thursday, July 17, 2008
SPECTROSCOPIC SURVEYS
1:30 p.m. Harborside E

Chairs: Richard Binzel
Amanda Hendrix

- 1:30 p.m. Emery J. P. * Lim L. F. Marchis F. Cruikshank D. P.
[*Asteroids and Centaurs: Silicate Emission in the Thermal Infrared*](#) [#8345]
- 1:50 p.m. Benner L. A. M. * Ostro S. J. Magri C. Nolan M. C. Howell E. S. Giorgini J. D.
Jurgens R. F. Margot J. L. Taylor P. A. Busch M. W. Shepard M. K.
[*Near-Earth Asteroid Surface Roughness Depends on Compositional Class*](#) [#8055]
- 2:05 p.m. Fornasier S. * Migliorini A. Dotto E. Barucci M. A.
[*Spectroscopic Survey of E-Type Asteroids, Including 2867 Steins, a Target of the Rosetta Mission*](#) [#8045]
- 2:20 p.m. Moskovitz N. A. * Jedicke R. Gaidos E. J. Willman M.
[*The Distribution of Basaltic Asteroids in the Main Belt*](#) [#8100]
- 2:35 p.m. Hendrix A. R. * Vilas F.
[*Weathering of S- and C- Class Asteroids: Effects at UV Wavelengths*](#) [#8361]
- 2:50 p.m. Dell'Oro A. * Cellino A.
[*GAIA: An Opportunity for the Physical Studies of Asteroids*](#) [#8008]
- 3:05 p.m. Lisse C. M. * Sitko M. L. Reach W. T. Dello Russo N. Fernandez Y. R.
[*Six Comets in the Infrared: Clues to the Formation and Evolution of the Solar System*](#) [#8224]
- 3:20 p.m. Krasnopolsky V. A. *
[*X-Ray Spectroscopy of Comets with Chandra X-Ray Observatory: Comparison of Results*](#) [#8068]
- 3:35 p.m. BREAK

Thursday, July 17, 2008
TNOS AND CENTAURS: THERMAL MODELS, SPECTROSCOPY, AND SURVEYS
4:00 p.m. Harborside D

Chairs: M. Antonietta Barucci
Michael Mueller

- 4:00 p.m. Barucci M. A. * E. S. O. Large Program Team
[*TNO ESO-VLT Large Program \(2006–2008\): Results and Implications*](#) [#8128]
- 4:20 p.m. Kavelaars J.-J. * Jones R. L. Gladman B. J. Petit J.-M. Parker J. W.
[*The Canada-France Ecliptic Plan Survey: L3 Data Release and the Orbital Structure of the Kuiper Belt*](#) [#8378]
- 4:35 p.m. Mueller M. * Spencer J. Stansberry J. Grundy W.
[*Mass Densities of KBOs and Centaurs from Spitzer Observations*](#) [#8360]
- 4:50 p.m. Romanishin W. * Tegler S. C. Consolmagno G.
[*Colors of Inner Disk KBOs*](#) [#8331]
- 5:05 p.m. Peixinho N. * Lacerda P. Jewitt D.
[*Classical Kuiper Belt: Modeling the Color-Inclination Trend*](#) [#8033]
- 5:20 p.m. Harris A. W. *
[*Spitzer and Herschel Observations of TNOs: Potential and Pitfalls*](#) [#8003]
- 5:35 p.m. Sarid G. * Prialnik D.
[*From TNOs to Centaurs: The Thermal Connection*](#) [#8252]
- 5:50 p.m. Guilbert A. * Federico C. Coradini A. Orosei R. Lasue J. Barucci M. A.
[*Thermal Modeling of Trans-Neptunian Objects*](#) [#8121]

Thursday, July 17, 2008
SCOPING OUT THE ROWDY NEIGHBORS: NEO SURVEYS AND HAZARDS
4:00 p.m. Harborside E

Chairs: Joseph Stuart
Donald Yeomans

- 4:00 p.m. Granvik M. * Muinonen K.
[*New Method for Identifying Asteroids over Apparitions Among a Wealth of Scarce Astrometry*](#) [#8205]
- 4:15 p.m. Tricarico P. *
[*Numerical Simulations of Efficient Search Strategies for Near Earth Objects Surveys*](#) [#8213]
- 4:30 p.m. Shucker B. D. Stuart J. S. *
[*Detecting Asteroids with a Multi-Hypothesis Velocity Matched Filter*](#) [#8388]
- 4:45 p.m. Giorgini J. D. * Benner L. A. M. Ostro S. J. Nolan M. C. Busch M. W.
[*Predicting the Earth Encounters of Apophis in 2029 and 2036*](#) [#8285]
- 5:00 p.m. Hildebrand A. R. * Tedesco E. F. Carroll K. A. Cardinal R. D. Matthews J. M. Gladman B.
Kaiser N. R. Brown P. G. Wiegert P. Larson S. M. Worden S. P. Wallace B. J.
Chodas P. W. Granvik M. Gural P.
[*The Near Earth Object Surveillance Satellite \(NEOSSat\) Mission Will Conduct an Efficient Space-Based Asteroid Survey at Low Solar Elongations*](#) [#8293]
- 5:15 p.m. Chodas P. W. * Giorgini J. D.
[*Impact Warning Times for Near-Earth Asteroids*](#) [#8371]
- 5:30 p.m. Yeomans D. K. * Bhaskaran S. Broschart S. R. Chesley S. R. Chodas P. W. Jones M. A.
Sweetser T. H. Lu E. T. Schweikart R. L.
[*Using a Gravity Tractor to Help Mitigate Asteroid Collisions with Earth*](#) [#8273]
- 5:45 p.m. Wolters S. D. * Green S. F.
[*The Night Emission Simulated Thermal Model \(NESTM\) for Near-Earth Asteroids*](#) [#8120]

Friday, July 18, 2008
SMALL BODY GEOLOGY
8:00 a.m. Harborside D/E

Chairs: Debra Buczkowski
Michael Belton

- 8:00 a.m. Cheng A. F. *
[*Inferences on Internal Structure and Physical Properties*](#) [#8309]
- 8:15 a.m. Richardson J. E. *
[*A 3-D Model of Asteroid Surface Evolution: Crater Creation and Erosion, Regolith Generation, and Hillslope Processes*](#) [#8090]
- 8:30 a.m. Buczkowski D. L. * Barnouin-Jha O. S. Prockter L. M.
[*Continuing Analyses of the Global Lineament Map of 433 Eros*](#) [#8153]
- 8:45 a.m. Barnouin-Jha O. S. * Prockter L. M. Cheng A. F.
[*The Diameter and Depth of Craters on 433 Eros.*](#) [#8276]
- 9:00 a.m. Davidsson B. J. R. * Gutiérrez P. J. Rickman H.
[*Physical Properties of Morphological Units on Comet 9P/Tempel 1*](#) [#8239]
- 9:15 a.m. Belton M. J. S. *
[*Outbursts on Tempel 1, Locations, Timing, and the View from the NExT Mission*](#) [#8006]
- 9:30 a.m. Hirata N. * Abe S. Ishiguro M. Kitazato K. Nakamura R. Miyamoto H.
Demura D. Abe M.
[*Geologic Processes on a Small Asteroid Itokawa*](#) [#8201]
- 9:45 a.m. Bruzzone J. S. * Roland S. Tancredi G. Favre S.
[*Itokawa: A Global Shaken and Fractured Asteroid with Brazilian Nut Effect*](#) [#8271]
- 10:00 a.m. BREAK

Friday, July 18, 2008
COMET TUTTLE
10:30 a.m. Harborside D/E

Chairs: John Harmon
Laura Woodney

- 10:30 a.m. Harmon J. K. * Nolan M. C. Howell E. S. Giorgini J. D.
[Comet 8P/Tuttle: Arecibo Radar Observations of the First Bilobate Comet](#) [#8025]
- 10:45 a.m. Groussin O. * Kelley M. S. Fernández Y. R. Jorda L. Lamy P. L. Toth I. Weaver H. A.
[The Size, Thermal Inertia and Water Production Rate of Comet 8P/Tuttle](#) [#8035]
- 11:00 a.m. Barber R. J. * Miller S. Dello Russo N. Tennyson J.
[Investigation of Water Features in the Near IR Spectrum of Comet 8P/Tuttle Using the BT2 Line List](#) [#8147]
- 11:15 a.m. Drahus M. * Jarchow C. Hartogh P. Waniak W. Bonev T. Borisov G. Czart K. Küppers M.
[Millimeter-Wavelength Spectroscopy as a Tool for Studying the Rotation of Active Comets: The Case Study of Comet 8P/Tuttle](#) [#8334]
- 11:30 a.m. Woodney L. M. * Schleicher D. G. Bair A. N.
[Rotational Properties of Comet 8P/Tuttle](#) [#8316]
- 11:45 a.m. Villanueva G. L. * Mumma M. J. Bonev B. P. DiSanti M. A. Gibb E. L. Boehnhardt H. Lippi M.
[Measurement of D/H in Comet 8P/Tuttle: On the Origin of Earth's Water](#) [#8373]
- 12:00 p.m. LUNCH

Friday, July 18, 2008
SHAPE OF THINGS
1:30 p.m. Harborside D

Chairs: Britney Schmidt
Bidushi Bhattacharya

- 1:30 p.m. Conrad A. R. * Merline W. J. Drummond J. D. Carry B. Dumas C. Tamblyn P. M.
Chapman C. R. Campbell R. D. Goodrich R. W.
[Properties of 4 Asteroids from Keck Adaptive Optics](#) [#8326]
- 1:45 p.m. Schmidt B. E. * Thomas P. C. Bauer J. M. Li J.-Y. McFadden L. A. Mutchler M. J.
Parker J. Wm. Rivkin A. S. Russell C. T. Stern S. A.
[Hubble Space Telescope Perspectives on Pallas](#) [#8318]
- 2:00 p.m. Carry B. * Dumas C. Kaasalainen M. Berthier J. Gil-Hutton R. Merline W. J.
Drummond J. D. Hestroffer D. Fulchignoni M. Conrad A. Erard S.
[Size and 3-D Shape of Asteroid Pallas Revisited](#) [#8303]
- 2:15 p.m. Gortas N. * Kührt E. Motschmann U.
[Numerical Studies of Surface Erosion in a Multi-Component Comet Nucleus](#) [#8220]
- 2:30 p.m. De Sanctis M. C. * Lasue J. Magni G. Coradini A. Capria M. T. Turrini D.
[Thermal Evolution of Non-Spherical Comet Nuclei](#) [#8071]
- 2:45 p.m. Shepard M. K. * Benner L. A. M. Ostro S. J. Nolan M. C. Giorgini J. D.
Magri C. Warner B. D.
[Radar Observations of Potentially Hazardous Asteroid 68950 \(2002 QF15\)](#) [#8029]
- 3:00 p.m. Bhattacharya B. * Mueller T. G. Kaasalainen M.
[Surface Property and Shape Models Derived from Spitzer Asteroid Light Curves](#) [#8311]
- 3:15 p.m. BREAK

Friday, July 18, 2008
INTERRELATIONS II
1:30 p.m. Harborside E

Chairs: Javier Licandro
David Nesvorny

- 1:30 p.m. Licandro J. * de León J. Pinilla-Alonso N. Campins H. Binzel R.
[*The Surface Properties of Damocloid 2002 RP120*](#) [#8198]
- 1:45 p.m. Moldowan A. * Wiegert P.
[*Continuing the Search for Main Belt Comets with the CFHT Legacy Survey*](#) [#8026]
- 2:00 p.m. Meng H. Zhu J. Zhai M. Mei L. Southworth J.
[*Some Results in the Near-Miss Occultation Survey for Extinct Comet Candidates*](#) [#8349]
- 2:15 p.m. Buratti B. J. * Hicks M. D. Bauer J. M. Clark R. N. Brown R. H. Baines K. H.
Nicholson P. D. Cruikshank D. P. Filacchione G. Mosher J. A.
[*Cassini VIMS 1–5 \$\mu\$ Spectra of the Small Saturnian Satellites: Relationships with Other Small Bodies*](#) [#8152]
- 2:30 p.m. Nesvorny D. * Bottke W. F. Vokrouhlicky D. Sykes M. Lien D. J. Stansberry J.
[*Origin of the Near-Ecliptic Asteroid Dust Band*](#) [#8265]
- 2:45 p.m. Thomas C. A. * Binzel R. P.
[*Pinpointing Main-Belt Source Regions for Meteorite Classes*](#) [#8264]
- 3:15 p.m. BREAK

Friday, July 18, 2008
SPACE WEATHERING AND TAXONOMIES
3:30 p.m. Harborside D

Chairs: Faith Vilas
Mark Loeffler

- 3:30 p.m. Mumma M. J. * DiSanti M. A. Bonev B. P. Villanueva G. L. K. Magee-Sauer K. Gibb E. L.
[*An Emerging Taxonomy for Comets Based on Organic Parent Volatiles: Implications for Dynamical and Chemical Processes in the Proto-Planetary Disk.*](#) [#8282]
- 3:45 p.m. Schleicher D. G. * Bair A. N.
[*Compositional Taxonomy of Comets and the Unique Cases of 96P/Machholz 1 and 73P/Schwassmann-Wachmann 3*](#) [#8174]
- 4:00 p.m. DeMeo F. E. * Bus S. J. Binzel R. P. Slivan S. M.
[*Bus-DeMeo Taxonomy: Extending Asteroid Taxonomy into the Near-Infrared*](#) [#8186]
- 4:15 p.m. Vilas F. * Sykes M. V.
[*Low Albedo Main-Belt Asteroids: Aqueous Alteration Trends with Smaller Diameters*](#) [#8343]
- 4:30 p.m. Willman M. C. * Moskovitz N. A. Jedicke R. Nesvorný D. Ivezić Z. Fevig R.
[*Space Weathering Rate Redetermination Using Iannini Asteroid Family Spectra*](#) [#8193]
- 4:45 p.m. Loeffler M. J. * Baragiola R. A.
[*Laser Irradiation of Olivine: Space Weathering Effects*](#) [#8229]

Friday, July 18, 2008
DYNAMICS
3:30 p.m. Harborside E

Chairs: David Vokrouhlický
Steven Chesley

- 3:30 p.m. Fernández J. A. *
[What Comets are Really “New”?](#) [#8091]
- 3:45 p.m. Horner J. A. * Jones B. W.
[Jupiter — Friend or Foe?](#) [#8114]
- 4:00 p.m. Vokrouhlický D. * Nesvorný D.
[Pairs of Asteroids Probably of Common Origin](#) [#8157]
- 4:15 p.m. Gladman B. J. * Coffey J.
[Mercurian Impact Ejecta: Meteorites and Mantle](#) [#8289]
- 4:30 p.m. Chesley S. R. * Vokrouhlický D. Ostro S. J. Benner L. A. M. Margot J.-L. Matson R. L.
Nolan M. C. Shepard M. K.
[Direct Estimation of Yarkovsky Accelerations on Near-Earth Asteroids](#) [#8330]
- 4:45 p.m. Tóth J. * Kornoš L. Vereš P.
[Evolution of Asteroidal Meteoroid Streams Released by the Earth’s Tides](#) [#8107]