**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. Kimberely 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 μm: 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. Cheuvront A.
*The Stardust NExT 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. Böhnhardt 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. Fujiyoshi 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 Skalnate 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 Asterod-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.
*Centaurs 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. Böhnhardt H. Stansberry J. Barucci A. Crovisier J. Delsanti A. Doressoundiram A. Dotto E. Duffard R. Fornasier S. Groussin O. Gutierreź 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.
*Hershel 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 [0I] 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/Tempel1* **[#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 $QW_{322}$* **[#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 Bockelé-Morvan**

1:30 p.m. Bockelée-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. * Bockelée-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 Nançay, 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. * Bockelée-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 Shacken 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. Gortsas 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 μ 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]**