

# **FINAL PROGRAM**

**Monday, June 11**

**Auditorium conference room**

## **Session 1: Observational Techniques and Meteor Detection Programs**

### Morning session

Session chairs: J. Borovicka and W. Edwards

9h00-9h50	Official Reception
9h50-10h00	Opening event
10h00-10h30	Pavel Spurny (Ondrejov Observatory, Czech Republic) et al. “Fireball observations in Central Europe and Western Australia – instruments, methods and results” (invited)
10h30-10h45	Josep M. Trigo-Rodríguez (Institute of Space Sciences IEEC-CSIC, Spain) et al. “Determination of meteoroid orbits and spatial fluxes by using high-resolution all-sky CCD cameras”
10h45-11h00	Prakash Atreya and Apostolos Christou (Armagh Observatory, Ireland) “The Armagh Observatory meteor camera cluster: overview and status”
11h00-11h30	Coffee break and Posters opened to discussion
11h30-12h00	Douglas O. ReVelle (Los Alamos National Laboratory, USA) “Acoustic-Gravity Waves from Bolide Sources” (invited)
12h00-12h15	Douglas O. ReVelle (Los Alamos National Laboratory, USA) et al. “Reanalysis of the Large Bolide Microbarograph Data”
12h15-12h30	Wayne Edwards (Univ. of Western Ontario, Canada) “Infrasound observations of meteoroids: Preliminary results from the coordinated optical-radar-infrasound observing campaign at SOMN”
12h30-12h45	José Chilo (Royal Institute of Technology, Sweden) et al. “Meteorite’s signal characterization and classification using Machine Learning Algorithms”
12h45-13h00	Pavlo Kozak (National Taras Shevchenko Univ., Ukraine) “Falling Star: software for complete processing of double-station TV observations of meteors”
	Lunch break

## Afternoon session

Session chairs: J. Watanabe and I. Williams

15h00-15h30	Diego Janches (NorthWest Research Associates/CoRA Division) “Meteor Head-Echo Observations Using High Power and Large Aperture Radar: A Review of Recent Results” (invited)
15h30-15h45	Peter G. Brown (Univ. of Western Ontario, Canada) et al. “The Southern Ontario Meteor Network (SOMN) – Overview of Sensors, Analysis Techniques and Status”
15h45-16h00	Robert J. Weryk (Univ. of Western Ontario, Canada) et al. “Comparisons of simultaneously detected radar and electro-optical meteors”
16h00-16h15	John D. Mathews (Pennsylvania State Univ., USA) et al. “Radio and meteor science outcomes from comparisons of meteor radar observations at AMISR Poker Flat, Sondrestrom, and Arecibo”
16h15-16h30	Akshay Malhotra (Pennsylvania State Univ., USA) et al. “A radio science perspective on Range-Spread Trail Echoes observed at Jicamarca”
16h30-17h00	Coffee break (Posters opened to discussion)

## **Session 2: Meteor showers’ activity and forecasting**

Session chairs: R. Weryk and P. Spurný

17h00-17h30	Jeremie Vaubaillon and William Reach (California Institute of Technology, USA) “Infrared observation of meteoroid streams in the vicinity of cometary nuclei” (invited)
17h30-17h45	David J. Asher (Armagh Observatory, N. Ireland) “Meteor Outburst Profiles and Cometary Ejection Models”
17h45-18h00	Peter S. Gural (SAIC, USA) and Peter Jenniskens (SETI Institute, USA) “Spatial Flux Density Characterization during the 1999 Leonid Storm”
18h00-18h15	Apostolos A. Christou (Armagh Observatory, N. Ireland) et al. “Annual and outburst meteor activity in the atmospheres and Venus and Mars”
18h15-18h30	Michael Nolan et al. (Arecibo Observatory, Puerto Rico, USA) “Large grains ejected from 73P/Swassmann-Wachmann 3”
18h30-18h45	Peter Jenniskens (SETI Institute, USA) “The upcoming encounter with dust of a long-period comet: the 2007 Aurigid outburst”

18h45-20h00      Posters opened to discussion

**Tuesday, June 12**

**Auditorium conference room**

**Session 2: Meteor showers' activity and forecasting**

Morning session

Session chairs: D. Asher and A. Christou

9h30-10h00	Junichi Watanabe (National Astronomical Observatory of Japan) "Activities of parent comets and related meteor showers" (invited)
10h00-10h15	Jurgen Rendtel (International Meteor Organization, Germany) "The Orionid meteor shower observed over 60 years"
10h15-10h30	Mikiya Sato and Junichi Watanabe (National Astronomical Observatory of Japan) "Origin of the outburst of Orionids 2006"
10h30-10h45	Pavel Koten (Ondrejov Observatory, Czech Republic) et al. "Video observations of the 2006 Leonid outburst"
10h45-11h00	Galina Ryabova (Tomsk State Univ., Russia) "Model radiants of the Geminid meteor shower"
11h00-11h30	Coffee break and Posters opened to discussion
11h30-12h00	Peter G. Brown (Univ. of Western Ontario, Canada) et al. "The Canadian Meteor Orbit Radar (CMOR) Meteor Shower Catalogue" (invited)
12h00-12h15	G. Yellaiah (Osmania Univ., India) "Perseid meteor shower observations by using Indian MST Radar"
12h15-12h30	Werner Singer (Leibniz Inst. of Atmospheric Physics, Germany) et al. "Influence of background dust on radar backscatter from meteor trails"
12h30-13h00	Special Talk: Maria E. Sansaturio and Óscar Arratia (Univ. Of Valladolid, Spain) "Apophis: the history behind the scenes" (invited)
	Lunch break

**Session 3: Orbits of meteoroids and dust**

Afternoon session

Session chairs: J. Toth and J.M. Trigo-Rodríguez

15h00-15h30	Peter Jenniskens (SETI Inst., USA) "(Mostly) dormant comets in the NEO population that have meteoroid streams" (invited)
15h30-15h45	Giovanni Valsecchi (IASF-INAF, Italy) "The spreading of meteoroid streams induced by close planetary encounters"
15h45-16h00	Margaret Campbell-Brown (Univ. of Western Ontario, Canada) "Directional velocity distribution and flux variation of the sporadic meteoroid sources"
16h00-16h15	Tadeusz J. Jopek (Astronomical Observatory AM Univ., Poland) "Remarks on the mean orbits of the meteoroid streams"
16h15-16h30	Jonathan Mc Auliffe (ESA/ESTEC, The Netherlands) et al. "Meteoroid Orbit Determination: A need for consensus"
16h30-17h00	Coffee break (Posters opened to discussion)

Session chairs: S. Abe and J. Vaubaillon

17h00-17h30	Paul Wiegert (Univ. of Western Ontario, Canada) “The dynamics of low-perihelion meteoroid streams” (invited)
17h30-17h45	Juraj Toth et al. (Comenius Univ. Bratislava, Slovak Republic) “Motion of a meteoroid released from an asteroid”
17h45-18h00	Leonard Komos and Juraj Toth (Comenius Univ. Bratislava, Slovak Republic) “Orbital evolution of Pribram and Neuschwanstein”
18h00-19h00	Poster session: Sessions 1+2+3
19h00-20h00	CosmoCaixa Open Public Lecture: Clark R. Chapman “The Hazard of Asteroids and Comets Impacting Earth”

## Wednesday, June 13

### Auditorium conference room

### Session 3: Orbits of meteoroids and dust (cont.)

#### Morning session

Session chairs: M. Campbell-Brown and D.O. ReVelle

9h30-10h00	Iwan Williams and D.C. Jones (Univ. of London, UK) “Meteorite streams: are they real?” (invited)
10h00-10h15	Shinsuke Abe (Kobe University, Japan) et al. “Orbit and spectroscopy of Earth-grazing meteoroid”
10h15-10h30	José M. Madiedo (Univ. Huelva, Spain) and Josep M. Trigo-Rodríguez (IEEC-CSIC, Spain) “Multi-station video observation of minor showers”
10h30-10h45	Csilla Szasz et al. (Swedish Inst. of Space Physics, Sweden) “Meteoroid orbit calculations from tristatic EISCAT UHF measurements”
10h45-11h00	Thomas Kehoe (Univ. of Florida, USA) “Dynamical evolution of asteroidal dust particles and their orbital element distribution in near-Earth space”
11h00-11h30	Coffee break (Posters opened to discussion)

### Session 4: Meteoroids interactions with atmospheres

Session chairs: J. Mc Auliffe and G. Valsecchi

11h30-12h00	Olga Popova (Inst. for Dynamic of Geospheres, Russia) “Models of meteoroid fragmentation” (invited)
12h00-12h15	Natalia G. Barri (Moscow State Univ., Russia) “Transverse scattering of meteoroid fragments in the atmosphere”
12h15-12h30	Tomas Vondrak (Univ. of Leeds, UK) et al. “Differential ablation of meteoroids a thermodynamic equilibrium model”
12h30-12h45	Jonathan T. Fentzke and Diego Janches (NorthWest Research Associates/CoRA Division) “A semi-empirical model of the contribution from sporadic meteoroid sources on the meteor input function observed at Arecibo”
12h45-13h00	Diego Janches and Jonathan T. Fentzke (NorthWest Research Associates/CoRA Division) “Estimating the meteoric mass flux in the Mesosphere and Lower Thermosphere Atmospheric region”
	Lunch break

## Afternoon session

Session chairs: D. Janches and O. Popova

15h00-15h30	Lars Dyrud et al. (Center for Remote Sensing Inc., USA) “Plasma and EM simulations of meteor head echo radar reflections” (invited)
15h30-15h45	Robert L. Hawkes et al. (Mount Allison Univ., Canada) “What can we learn about atmospheric meteor ablation and light production from laser ablation?”
15h45-16h00	Johan Kero et al. (Swedish Inst. of Space Physics, Sweden) “Meteoroid disintegration characteristics in EISCAT HPLA radar observations”
16h00-16h15	Johan Kero et al. (Swedish Inst. of Space Physics, Sweden) “Three dimensional radar observation of a submillimeter meteoroid fragmentation”
16h15-16h30	Masa-yuki Yamamoto et al. (Kochi Univ. Of Technology, Japan) “Invisible persistent trains generated by Geminids”
16h30-17h00	Coffee break (Posters opened to discussion)

Session chairs: F. Rietmeijer and J. Kero

17h00-17h30	Matthew J. Genge (Imperial College London, UK) “The nature and diversity of micrometeorites” (invited)
17h30-17h50	Peter Jenniskens (SETI Inst., USA) “Goals and objectives of the IAU Commission 22's Task Group on Meteor Shower Nomenclature” (round table)
17h50-18h00	Douglas O. ReVelle (Los Alamos National Laboratory, USA) “Public Announcement: Progress in fireball detections”
18h00-19h00	Poster session: Sessions 4+5+6

**Thursday, June 14**

**Auditorium conference room**

**Session 5: Astromineralogy: Comet 81P/Wild 2 and cometary meteoroids**

Morning session

Session chairs: R. Hawkes and J. Llorca

9h30-10h00	George J. Flynn (SUNY-Plattsburgh, USA) “Elemental Composition of Dust Collected at Comet 81P/Wild 2 by NASA's Stardust Spacecraft” (invited)
10h00-10h30	Frans J.M. Rietmeijer (University of New Mexico, USA) “Cometary meteoroids after Stardust” (invited)
10h30-11h00	Alessandra Rotundi (Università degli Studi di Napoli “Parthenope”, Italy) et al., “Combined Micro-IR and Micro-Raman Analyses of Comet 81P/Wild 2 Particles Collected by Stardust” (invited)
11h00-11h30	Coffee break and Posters opened to discussion
11h30-12h00	Jiri Borovicka et al. (Ondrejov Observatory, Czech Republic) “Properties of cometary dust from meteor observation” (invited)
12h00-12h15	Toshihiro Kasuga (Inst. for Astronomy, Univ. of Hawaii, USA) “Metal abundances of meteoroids in meteor showers: solar heating effect on the meteoroids”
12h15-12h45	Josep M. Trigo-Rodríguez (Institute of Space Sciences IEEC-CSIC, Spain) et al. “Structure and composition of cometary meteoroids: clues from comet 81P/Wild 2, carbonaceous chondrites and IDPs” (invited)
	Lunch break and Barcelona tour

Afternoon:

15h00-19h00: Barcelona tour. Visit to the Sagrada Familia cathedral, Park Güell, and the Modernism route.

20h00: Complementary dinner for all meeting attendants in Restaurant *Magnum 7 Portes*, located in Salvador Espriu 73-75 (nearby Hotel Arts).

**Friday, June 15**

**Agora conference room**

**Session 6: Meteoroid flux, Impact Hazard, and Solar System dust**

Morning session

Session chairs: J. L. Ortiz and V. Dikarev

9h30-10h00	Clark R. Chapman (Southwest Research Institute, USA) “Meteoroids, meteors, and the NEO Impact Hazard” (invited)
10h00-10h15	Rob Suggs et al. (NASA Marshall Space Flight Center/EV13, USA) “NASA's Lunar Meteoroid Impact Monitoring Program”
10h15-10h30	Valeri Dikarev et al. (Max Planck Inst. For Solar System Res., Germany) “Understanding the WMAP Results: The Low-l Anomalies and Dust in the Vicinity of the Solar System”
10h30-10h45	Munetaka Ueno et al. (Univ. of Tokio, Japan) “Observations of Zodiacal Light during the cruising phase of PLANET-C/VCO Mission”
10h45-11h00	G. Drolshagen et al. (ESA/ESTEC, The Netherlands) “Comparison of meteoroid flux models for near Earth space”
11h00-11h30	Coffee break and Posters opened to discussion
11h30-12h00	Closure talk: Joseph A. Nuth (NASA Goddard Space Flight Center, USA) “What was the chemical composition of the planetesimals that formed the terrestrial planets?” (invited)
12h00-12h30	Conference summary and closure ceremony