

Impacts in Planetary Systems Programme 16th May

Lund, 15th – 17th May 2017

Lundmarksalen, Lund Observatory

Monday 15th May

Morning chair: Anders Johansen

0830 – 0900 Registration
0900 – 0905 Alexander Mustill (Lund Astro) *Short introduction and welcome to meeting*
0905 – 0910 Melvyn B. Davies (Lund Astro) *Impacts in Lund*

Session 1: The Solar System

Invited speakers:

0910 – 0945 Alessandro Morbidelli (Nice) *The Nice model and dynamics of the Late Heavy Bombardment*
0945 – 1020 Christian Koeberl (Vienna) *The terrestrial impact record*

1020 – 1100 Coffee/Tea Break

Contributing speakers:

1100 – 1120 Samuele Boschi (Lund Astrogeobio) *Late Eocene ^3He and Ir anomalies associated with ordinary chondritic spinels*
1120 – 1140 Gavin Kenny (NRM Stockholm) *Dating impacts with shock metamorphosed zircon*
1140 – 1200 Ellinor Martin (Lund Astrogeobio) *Meteorite flux in the Late Cretaceous*
1200 – 1330 Lunch at Ideon (see blue “1” on map)

Afternoon chair: Ross Church

Invited speakers:

1330 – 1405 Bill Bottke (SWRI Boulder) *The timing of the Moon-forming impact*
1405 – 1440 David Nesvorný (SWRI Boulder) *The Evolution of the Asteroid Belt*

Contributing speakers:

1440 – 1505 Birger Schmitz (Lund Astrogeobio) *The history of the asteroid belt as reconstructed from Earth’s sedimentary record*
1505 – 1545 Coffee/Tea break
1545 – 1605 Simona Pirani (Lund Astro) *The evolution of the asteroid belt in the pebble accretion scenario*
1605 – 1625 Diego Turrini (INAF-IAPS) *Vesta knows best: constraining the formation and migration of Jupiter with the Dawn mission and the HED meteorites*
1625 – 1645 Anders Johansen (Lund Astro) *On the birth size distribution of planetesimals*
1645 – 1705 Alice Chau (UZH Zürich) *On the origin of Mercury*
1705 – 1725 Christoph Mordasini (Bern) *Impacts into (proto)planetary atmospheres – predictions for Jupiter’s core mass*
1800 – later *An evening with champagne and hydrofluoric acid: A tour of the Lund Astrogeobiology Lab with Birger Schmitz*

Tuesday 16th May

Morning chair: Bertram Bitsch

0900 – 0920 Christian Reinhardt (UZH Zürich) *A preliminary study of giant impacts on Uranus and Neptune*

Session 2: Debris Discs

Invited speaker:

0920 – 0955 Mark Wyatt (Cambridge) *Debris discs, exo-asteroids and exo-comets*

Contributing speakers:

0955 – 1015 Mark Booth (Jena) *Observing the Closest Debris Disc with ALMA*

1015 – 1100 Coffee/Tea Break

1100 – 1120 Torsten Loehne (Jena) *Collisions and drag in debris discs with eccentric parent belts*

1120 – 1140 Isabel Rebolledo (UAM) *Exocomets in Main-Sequence Stars*

1140 – 1200 Fabian Geiler (Jena) *Does warm debris dust stem from asteroid belts?*

1200 – 1345 Lunch at Ideon (see blue “1” on map)

Afternoon chair: Noemi Schaffer

Invited speaker:

1345 – 1420 Erika Nesvold (Carnegie DTM) *Collisional and n-body modelling of debris discs*

Contributing speakers:

1420 – 1440 Philippe Thebault (Paris) *Prospects for detecting biomarkers in exoplanetary impact ejecta*

1440 – 1500 Dimitri Veras (Warwick) *Planetary debris impacting white dwarfs*

1500 – 1540 Coffee/tea break

Session 3: Planet Formation and Composition

Invited speakers:

1540 – 1615 Eric Gaidos (Hawai‘i) *How Kepler’s view of the planetary mass–radius diagram informs about the late giant-impact stages of planet formation*

1615 – 1650 Sean Raymond (Bordeaux) *Global models for the origin of the inner Solar System and super-Earths*

Contributing speakers:

1650 – 1710 Alexander Mustill (Lund Astro) *Modelling the extreme collisional environment of transiting planets*

1710 – 1730 Nader Haghighipour (Hawai‘i) *Toward a More Realistic Treatment of Collisions in Simulations of Terrestrial Planet Formation*

1930 – later Conference dinner at Elite Hotel Ideon

Wednesday 17th May

Morning chair: Alexander Mustill

Invited speakers:

0935 – 1010 Caroline Dorn (Bern) *Planetary structures and compositions*

Contributing speakers:

1010 – 1030 Bertram Bitsch (Lund Astro) *The interplay between planet growth and migration*

1030 – 1115 Coffee/tea break

1115 – 1135 Yann Alibert (Bern) *On the growth of planetary embryos formed in core-accretion models: pebbles versus planetesimals*

1135 – 1155 Sergei Nayakshin (Leicester) *3D simulations of pebble accretion onto and inside massive gas clumps*

1155 – 1215 Chao-Chin Yang (Lund Astro) *Planetesimal formation in a turbulent protoplanetary disk*

1215 – 1235 Mark Fletcher (Leicester) *An implicit integration scheme for dust grains in PHANTOM*

Poster contributions

CHEOPS Consortium

CHEOPS: CHaracterising ExOPlanet Satellite

CHEOPS Consortium

Observing with CHEOPS

Mattia Galiazzo (Vienna)

Possible impacts with Centaurs

Ayyub Guliyev (Shamakhy)

About real evidence of impact processes on comets

Giorgi Kokaia (Lund Astro)

Stellar Encounters with Giant Molecular Clouds

Ximena Ramos (Copenhagen/Córdoba)

Post-escape dynamical evolution of Jupiter Trojans

Alexey Rosaev (Yaroslavl)

Evolution of ejection velocity in very young asteroid families

Andreas Schreiber (MPIA Heidelberg)

All Planetesimals are born equal – Why the size distribution of Asteroids and Kuiper Belt objects is so similar

Jan Sende (Jena)

Influence of secular planetary perturbations on collisionally evolved debris disk

Barry Welsh (UC Berkeley)

Newly discovered exocomets