

ESA Space Science Faculty Workshop, SSW#15
30 November – 02 December 2022, Akersloot, The Netherlands

Wednesday, 30 November 2022

11:30 Bus ESTEC – Akersloot

12:00 Bus Schiphol – Akersloot

12:00 – 14:30 Arrival, Lunch (room keys available as of 14:00)

14:30 – 14:45 Welcome (Markus Kissler-Patig), Introduction (Chair), Start of program

14:45 – 15:45 Science Talks, Chairing: In-room: Oliver Hall, Online: Jack Wright

14:45 – 15:00 *Solar Jet Hunter, a citizen project to study jets in the solar corona*, Sophie Musset

15:00 – 15:15 *Bursts and bombs in the solar atmosphere - a magnetic reconnection story*, Chris Nelson

15:15 – 15:30 *Solar flare X-ray observations of time-variability with Solar Orbiter STIX*, Laura Hayes

15:30 – 15:45 *Solar System Objects as Observed by Euclid*, Aurélien Verdier

15:45 – 16:15 Coffee break

16:15 – 17:35 Science Talks, Chairing: In-room: Jack Wright, Online: Oliver Hall

16:15 – 16:30 *A Martian investigation: Where did the water go and where is it now?* Lucie Riu

16:30 – 16:45 *Understanding Recent River Flows on Mars*, Rickbir Bahia

16:45 – 17:00 *What lurks beneath the polar ice caps of Mars?* Colin Wilson

17:00 – 17:15 *The power of combining science and visualisations*, Tineke Roegiers

17:15 – 17:35 **Invited:** *JWST: New science results*, Chris Evans

17:35 – 18:35 Poster session (in person & online, poster pitch talks), Chairing: In-room: Ricci Bahia,
Online: Chris Nelson &

Introduction of new Research Fellows, Chairing: Yannis Zouganelis

18:35 – 20:00 Welcome Cocktail/Snacks/Posters (@ venue)/Socializing

20:00 Dinner

Thursday, 01 December 2022

07:30 – 08:20 Special event: *Yoga class at venue*, Miho Janvier, Sophie Musset

09:30 – 10:30 Science Talks, Chairing: In-room: Eleni Bohacek, Online: Katja Fahrion

09:30 – 09:45 *Comparative (icy) planetology using photometry*, Ines Belgacem

09:45 – 10:00 *The 3.1 μm NIR feature is not due to surface water ice on asteroids*, Laurence O'Rourke

10:00 – 10:15 *What can impact ejecta from the Caloris basin tell us about Mercury's interior and formation?* Jack Wright

10:15 – 10:30 *Yes, Hollows on Mercury are made of sulfides and it drives their spatial distribution!*
Sebastien Besse

10:30 – 11:00 Coffee break

11:00 – 12:30 Science Talks, Chairing: In-room: Katja Fahrion, Online: Eleni Bohacek

11:00 – 11:15 *Solar Orbiter and the solar/heliospheric fleet coordinated observations of a filament eruption: a test bed for a global eruptive flare model*, Miho Janvier

11:15 – 11:30 *Is AD Leo featuring a polarity reversal of the large-scale magnetic field? Long-term monitoring across near-infrared and optical domains with SPIRou, ESPaDOnS and NARVAL*, Stefano Bellotti

11:30 – 11:45 *Probing small exoplanets' evolution with the ESA-powered Antarctic telescope and HST*, Maximilian Guenther

11:45 – 12:00 *Precise Dynamical Masses of New Directly Imaged Companions from Combining Relative Astrometry, Radial Velocities, and Hipparcos-Gaia eDR3 Accelerations*, Emily Rickman

12:00 – 12:15 *Towards population studies of exoplanet atmospheres*, Quentin Changeat

12:15 – 12:30 *Data Science: The Good, the Bad and the Ugly*, Jan Reerink

12:30 – 14:00 Lunch

14:00 – 15:30 Science Talks, Chairing: In-room: Emily Rickman, Online: Ines Belgacem

14:00 – 14:15 *So, was I right or was I wrong?* Guido De Marchi

14:15 – 14:30 *A glimpse into the internal kinematics of globular clusters with HST*, Mattia Libralato

14:30 – 14:45 *Characterising the asteroseismic Red Clump standard candle in Gaia magnitude, colour, metallicity and alpha abundance*, Oliver Hall

14:45 – 15:00 *White dwarfs, dust, discs and debris*, Nicola Gentile Fusillo

15:00 – 15:15 *Fast & Furious: The time-domain richness of X-ray transient phenomena*, Alicia Rouco Escorial

15:15 – 15:30 *Looking for observational signatures of feedback from accreting supermassive black Holes*, Chiara Circosta

15:30 – 16:00 Coffee break

16:00 – 17:00 Science Talks, Chairing: In-room: Ines Belgacem, Online: Emily Rickman

16:00 – 16:15 *Scientific landing site analysis for ESA's PROSPECT instrument*, Sarah Boazman

16:15 – 16:30 *Individual dust particle analysis in the surroundings of 67P*, Julia Marin-Yaseli de la Parra

16:30 – 16:45 *Are spacecraft engineering data useful for science purposes?* Olivier Witasse

16:45 – 17:00 *Unraveling ion acceleration in solar energetic particle events with Solar Orbiter*, Nils Janitzek

17:00 – 17:20 Poster session (in person & online, poster pitch talks), Chairing: In-room: Lucie Riu, Online: Maximilian Guenther

17:20 – 17:35 Short coffee break

17:35 – 18:35 Faculty Matters

18:35 – 20:00 Posters (@ venue) , Free time, Socializing

20:00 Dinner buffet

Friday, 02 December 2022

Before 09:00 Check-out from hotel

09:00 – 09:40 Science Talk, EDI, Chairing: In room: Gaitte Hussain, Online: Lucie Riu

09:00 – 09:40 *Diversity & Inclusion: Well-being in Astronomy*, Natalie Webb

09:40 – 10:40 Science Talks, Chairing: In room: Chiara Circosta, Online: Lucie Riu

09:40 – 09:55 *From the center of the Milky Way to the most distant objects in the Universe*,
Alice Young

09:55 – 10:10 *How do nuclear star clusters form?* Katja Fahrion

10:10 – 10:30 *JWST: New science results*, Chris Evans

10:30 – 10:45 *Preparing for JWST with HST/COS spectroscopy of Pox 186: a local analogue of $z > 6$ Galaxies*, Nimisha Kumari

10:45 – 11:10 Coffee break (final opportunity for check-out)

11:10 – 12:05 Science Talks, Chairing: In room: Oliver Jennrich, Online: Ricci Bahia

11:10 – 11:50 *How observing the Earth from Space supports our quest to tackle climate Change*, Susanne Mecklenburg, ESA Climate Office

11:50 – 12:05 *The Cosmological Likelihood for Observables in Euclid*, Guadalupe Canas Herrera

12:05 – 12:10 Thanks (Chair) and

12:10 – 12:30 Closing Remarks: Guenther Hasinger

12:30 – 13:30 Lunch

13:30 Bus for Schiphol leaving

14:00 Bus for ESTEC leaving