

Session 2: Game changers (8/9 Nov 2023)

Chair P. Hallibert

Day 3 - Wednesday November 8th, 2023 - Game changers						
Start	Stop	Title	Speaker	Affiliation		
08:50	09:00	Introduction day 3	P. Hallibert	ESA		
Session #2-1 - Novel optical sensing payload and mission concepts						
<i>Session Chairs: Ulrich Wiltrock (FH Muenster), Julien Archer (ADS)</i>						
09:00	09:20	Hypertelescopes in space for very high angular resolution	Jean Labeyrie, Liam Koning et al	Observatoire Cote d'Azur, Observatoire Pic du Midi, Leiden		
09:20	09:40	Replacing a telescope by a compact interferometric imager	Laurent Mugnier et al	ONERA, CNES		
09:40	10:00	Laboratory demonstrator of a super-resolved, compressive sensing-based imager working in the VIS-NIR-MIR	Cinzia Lastri et al	CNR-IFAC, CSEM, SAITEC Srl, Politecnico di Torino		
10:00	10:20	A novel approach for a spaceborne solar-blind Doppler lidar for superior wind measurements in the tropo-, strato- and mesosphere	Michael Strotkamp et al	Leibniz Institute of Atmospheric Physics		
10:20	10:40	Unlocking the Potential of Heterodyne Interferometry: Overcoming Limitations in Astronomical Observations	Alan Guenther et al	Leibniz-Institute for Astrophysics Potsdam (AIP)		
10:40	11:10	Coffee break				
Session #2-2						
<i>Shaping light: novel enabling components and subsystems pt I</i>						
<i>Session Chairs: Markus Erhard (OHB), Tibor Agocs (ESA)</i>						
11:10	11:30	Integrated Optics for Extrasolar Planet Science	Nick Cvetojevic	Lagrange, LESIA, IPAG		
11:30	11:50	A photonic crystals enabled compressive sensing spectrometer for trace gas observation	Marijn Siemons et al	SRON, et al		
11:50	12:10	Towards the Compact Potsdam Arrayed Waveguide Spectrograph (CPAWS) for space applications	Kalaga Madhav et al	Leibniz-Institut für Astrophysik Potsdam (AIP)		
12:10	12:30	Patterned broadband liquid-crystal optics enabling radical optical concepts for astronomy and Earth observation	Frans Snik et al	Leiden Obs. / SRON		
12:30	13:00	Discussion sessions #2-1 and #2-2				
13:00	14:00	Lunch				
Session #2-3						
<i>Shaping light: novel enabling components and subsystems pt II</i>						
<i>Session Chairs: Thierry Viard (TAS), Pascal Hallibert (ESA)</i>						
14:00	14:20	Gratings for future spectro-imagers in space: from lithography techniques to metasurfaces	Frederic Zamkotsian et al	LAM, Institut Fresnel, FEMTO-ST, CSEM		
14:20	14:40	Meta-optical elements as enablers for the next generation lightweight compact advanced functionality remote sensing optical systems	Vesselin Vassilev et al	Labora Expert, ARC Centre of Excellence TMOS		
14:40	15:00	Spatial Light Modulators for space applications	Sara Francés González	Fraunhofer Institute for Photonic Microsystems IPMS		
15:00	15:20	Applications of liquid crystal devices for optical payloads	Pilar García Parejo et al	Eye4Sky Technologies S.L.		
15:20	16:00	Coffee break				
Session #2-4						
<i>New look at classical subsystems and their novel applications</i>						
<i>Session Chairs: Markus Erhard (OHB), Tibor Agocs (ESA)</i>						
16:00	16:20	Enabling Integral Field Spectroscopy in the Extreme Ultra-Violet using image slicers: challenges, developments and applications	Ariadna Calcines et al	Durham University, UK		
16:20	16:40	MICS: A Game Changing Snapshot Hyperspectral Imager for Future Space Missions	Haosheng Lin et al	Institute for Astronomy, University of Hawaii, Canon Inc.		
16:40	17:00	Miniaturized in-flight calibrator source for hyperspectral space optical instruments	Robert J. Rengelink	Cosine Remote Sensing B.V.		
17:00	17:30	Discussion and wrap-up sessions #2-3 and #2-4				
Session #2-5						
<i>Poster session</i>						
17:30	19:30	Poster session and reception				