PLATO Conference 2021 programme

Monday 11 October

Time (CEST)	Title	Speaker	Affiliation	Talk duration
PLATO Mission Chair: Isabella Pagano				
14:00	Welcome and introduction			0:05
14:05	PLATO science objectives - PLATO Mission Consortium	Heike Rauer	DLR	0:20
14:25	Consortium scientific activities and community involvement	Don Pollacco	U. Warwick	0:10
14:35	PLATO mission design, spacecraft and payload	Filippo Marliani Frank Steier Luca Valenziano Gisbert Peter	ESA OHB INAF DLR	0:30
15:05	PLATO Ground Segment - an overview	Laurence O'Rourke Laurent Gizon	ESA MPS	0:15
15:20	PLATO as a resource for the astronomical community	Ana Heras	ESA	0:10
15:30	Coffee Break			0:15
PLATO skyfields and PIC Chair: Keivan Stassun				
15:45	The PLATO Input Catalogue and Sky field selection	Giampaolo Piotto	Università degli Studi di Padova	0:30
16:15	The TESS Input Catalog and Lessons For PLATO (Invited)	Joshua Pepper	Lehigh University	0:30
16:45	CARMENES and the Frontiers of High-Resolution Spectroscopy for M dwarfs: Fundamental Stellar Parameters and Chemical Abundances	Yutong Shan	University of Göttingen	0:15
17:00	Discussion			0:30
17:30	Coffee Break			0:15
Planetary structure, composition, evolution and architecture of planetary systems (i) Chair: Andrew Winter				
17:45	New insights into Super-Earth interiors (Invited)	Caroline Dorn	University of Zurich	0:30
18:15	Characterisation of the interior structures and atmospheres of multiplanetary systems.	Lorena Acuña	LAM	0:15
18:30	On the origin of the radius valley: formation and evolution	Christoph Mordasini	University of Bern	0:15
18:45	Exploring the Nu2 Lupi system with CHEOPS	Laetitia Delrez	University of Liege	0:15
19:00	Transit-Radial Velocity synergy to unveil the young exoplanet population and study the evolution of planetary systems	Serena Benatti	INAF - Astronomical Observatory of Palermo	0:15
19:15	End of Day 1			

Tuesday 12 October

Time (CEST)	Title	Speaker	Affiliation	Talk duration
Planetary structure, composition, evolution and architecture of planetary systems (ii) Chair: Cilia Damiani				
14:00	Correlations in Planetary System Architecture	Lokesh Mishra	University of Geneva and Bern	0:15
14:15	CHEOPS and HARPS characterisation of a multi-planet system discovered by TESS	Thomas Wilson	University of St Andrews	0:15
14:30	Stability and spacing of tightly packed systems	Antoine Petit	University of Copenhagen	0:15
14:45	Extreme exoplanet obliquities due to the tidal migration of unseen moons	Melaine Saillenfest	IMCCE, Observatoire de Paris	0:15
15:00	Chemical abundances of stars and their impact on the interior structure of rocky planets (Invited)	Natalie Hinkel	Southwest Research Institute	0:30
15:30	Coffee Break			0:15
15:45	Unveiling the atmospheric evolution of exoplanets	Andrea Bonfanti	ÖAW - Austrian Academy of Sciences	0:15
16:00	Poster pitch presentations			0:15
Asteroseismology and stellar characterisation Chair: Gaël Buldgen				
16:15	Asteroseismic Data Analysis for Mode Frequencies for PLATO (Invited)	Guy Davies	University of Birmingham	0:30
16:45	Seismic modeling of solar-like pulsators in the PLATO era (Invited)	Sebastien Deheuvels	Institut de Recherche en Astrophysique et Planétologie	0:30
17:15	PLATO Hare-and-Hounds exercise: Modelling main sequence stars	Margarida Cunha	Instituto de Astrofísica e Ciências do Espaço	0:15
17:30	Coffee Break			0:15
17:45	Asteroseismic probing of low mass solar-like stars throughout their evolution with new techniques	Martin Farnir	Université de Liège	0:15
18:00	Non-seismic (and Non-LTE) stellar parameters for the PLATO core sample (Invited)	Maria Bergemann	Max Planck Institute for Astronomy	0:30
18:30	What to expect from non-seismic stellar characterisation with PLATO lightcurves	Lisa Bugnet	Center for Computational Astrophysics, Flatiron Institute	0:15
18:45	Asteroseismic measurement of the inclination angle: characterizing exoplanetary systems	Charlotte Gehan	Max Planck Institute for Solar System Research	0:15
19:00	Simultaneous seismic modelling of multiple stars using correlated parameters	Warrick Ball	University of Birmingham	0:15
19:15	End of Day 2			

Wednesday 13 October

Time (CEST)	Title	Speaker	Affiliation	Talk duration
Stellar variability Chair: Timo Reinhold				
14:00	Characterising small exoplanets in the face of intrinsic stellar variability (Invited)	Raphaelle Haywood	University of Exeter	0:30
14:30	Evolution of magnetic activity on the main sequence as a function of spectral type using Kepler data	Savita Mathur	Instituto de AstrofÍsica de Canarias	0:15
14:45	Rotation & activity of M dwarfs: From K2 to TESS and PLATO	Beate Stelzer	Eberhard-Karls Universität Tübingen	0:15
15:00	Seismic diagnostics of stellar activity cycles	Valeriy Vasilyev	Max Planck Institute for Solar System Research	0:15
15:15	Characterizing stellar granulation with 3D stellar atmosphere models	Luisa Fernanda Rodríguez Díaz	Stellar Astrophysics Centre, Aarhus University	0:15
15:30	Coffee Break			0:15
15:45	Poster pitch presentations			0:15
Long-period small planets and habitability Chair: Tim Lichtenberg				
16:00	Invited talk	Victoria Meadows	University of Washington	0:30
16:30	Water oceans on high-density exoplanets from coupled interior-atmosphere modeling	Philipp Baumeister	DLR Berlin	0:15
16:45	Kepler's Small Planets and their Dependence on Stellar Mass	Galen Bergsten	Lunar and Planetary Laboratory, The University of Arizona	0:15
17:00	Eta-Earth Revisited: A Formula for Earth-like Habitats	Helmut Lammer	Austrian Academy of Sciences, Space Research Institute	0:15
17:15	HIP41378: a foretaste of PLATO	Alexandre Santerne	Laboratoire d'Astrophysique de Marseille	0:15
17:30	Coffee Break			0:15
17:45	The Consequences of Binary Exoplanet Host Stars	Steve Howell	NASA	0:15
18:00	Planets are places: Characterization of other Worlds in the 2020s and Beyond (Invited)	Laura Kreidberg	Max Planck Institute for Astronomy	0:30
18:30	Habitability and loss of hydrogen-helium atmospheres of small planets - the K dwarf advantage	Katja Poppenhäger	Leibniz Institute for Astrophysics Potsdam (AIP)	0:15
18:45	Can active plate tectonics leave an observational feature in a planet's atmosphere?	Lena Noack	Freie Universität Berlin	0:15
19:00	Stellar space weather effects on habitable-zone planets	Aline Vidotto	Trinity College Dublin & Leiden University	0:15
19:15	End of Day 3			

Thursday 14 October

Time (CEST)	Title	Speaker	Affiliation	Talk duration
Light Curve analysis Chair: Sophia Sulis				
14:00	Invited talk	Juan Cabrera	DLR Berlin	0:30
14:30	An Overview of Transiting Exoplanet Detection (Invited)	Andrew Vanderburg	University of Wisconsin-Madison	0:30
15:00	Alleviating the Transit Timing Variations bias in transit surveys	Adrien LELEU	Université de Genève	0:15
15:15	Automated planet validation from transit surveys - lessons from Kepler and potential for PLATO	David Armstrong	University of Warwick	0:15
15:30	Coffee Break			0:15
15:45	SINGLETRANS, the search for single transits of small planets in light curves of space missions	Sascha Grziwa	RIU Planetary Research at the University of Cologne	0:15
16:00	Poster pitch presentations			0:15
Advances in modelling stellar internal structure and evolution Chair: Hans-Günter Ludwig				
16:15	Stellar modeling in the age of PLATO (Invited)	Aldo Serenelli	Institute of Space Sciences - CSIC	0:30
16:45	Lithium depletion and angular momentum transport in low-mass stars	Thibaut Dumont	University of Geneva	0:15
17:00	Impact of the transport of chemical elements on the internal structure and surface abundances of stars	Morgan Deal	Instituto de Astrofísica e Ciências do Espaço (IA)	0:15
17:15	On the Potential of the Reynolds Stress Approach to Model Convective Overshooting in Grids of Stellar Evolution Models	Friedrich Kupka	Univ. of Applied Sciences Technikum Wien	0:15
17:30	Coffee Break			0:15
17:45	Entropy-calibrated models of solar-like stars	Federico Spada	Max Planck Institute for Solar System Resarch	0:15
Complementary science topics benefitting from PLATO high-precision photometry Chair: Konstanze Zwintz				
18:00	The PLATO Complementary Science program (Invited)	Andrew Tkachenko	KU Leuven	0:30
18:30	From TESS to PLATO: A Galactic archaeology perspective	Thibault Boulet	Centro de Astrofísica da Universidade do Porto	0:15
18:45	Tracers of Exoplanet Composition	Amy Bonsor	Institute of Astronomy, University of Cambridge	0:15
19:00	Exoplanets in stellar clusters and young associations: the path-way from TESS to PLATO	Domenico Nardiello	Laboratoire d'Astrophysique de Marseille	0:15
19:15	End of Day 4			

Friday 15 October

Time (CEST)	Title	Speaker	Affiliation	Talk duration
Ground-based observations for the confirmation and mass determination of planets Chair: Annelies Mortier				
14:00	Ground-based facilities and techniques for characterising Earth analogues (Invited)	Andrew Collier-Cameron	University of St. Andrews	0:30
14:30	Extremely precise HARPS-N solar RV to overcome the challenge of stellar signal	Xavier Dumusque	University of Geneva	0:15
14:45	Confirming & detecting circumbinary planets using radial-velocities	Amaury Triaud	University of Birmingham	0:15
15:00	Stellar characterization, activity, and terrestrial planets: Results from five years of CARMENES spectroscopy	Ansgar Reiners	Institut für Astrophysik Göttingen	0:15
15:15	Stellar Companions: Hiding the Earth-sized Transiting Planets	David Ciardi	NASA Exoplanet Science Institute - Caltech/IPAC	0:15
15:30	Coffee Break			0:15
15:45	Radial velocity follow-up of young transiting planets: promising results from selected case studies	Mario Damasso	INAF-Astrophysical Observatory of Torino	0:15
16:00	Discussion			0:30
PLATO in the context of Kepler/K2, TESS, CHEOPS, JWST, Roman, ARIEL and large ground-based observatories Chair: Jessie Christiansen				
16:30	PLATO-Gaia synergy for studying transiting exoplanets	Aviad Panahi	Tel Aviv University	0:15
16:45	Optimizing Science Return from Plato's Observations of the Kepler Field	Jack Lissauer	NASA Ames	0:15
17:00	Detection and Characterization of Exoplanets Using Current and Future US Observatories (Invited)	Scott Gaudi	Ohio State University	0:30
17:30	Coffee Break			0:15
17:45	High-precision photometry of PLATO targets observed by TESS	Marco Montalto	Universitá di Padova	0:15
18:00	The future of exoplanet characterisation - the European route (Invited)	Ignas Snellen	Leiden Observatory	0:30
18:30	LIFE – characterizing the climates of terrestrial exoplanets in the wake of PLATO	Tim Lichtenberg	University of Oxford	0:15
18:45	Concluding remarks			0:15
19:00	End of Day 5			