IAU Symposium 376 Draft Programme, 8 March 2023

Monday 17 April 2023			
09:00–12:20 Chair: Róbert Szabó			
09:00–09:30		*Opening ceremony*	Addresses by the SOC and LOC
09:30–10:00	R	Wendy Freedman (virtual)	The Extragalactic Cepheid Distance Scale
Session I: Setting the Scene – The Extragalactic 'Problem'			
10:00–10:30	R	Adam Riess	Local Value of the Hubble Constant from SH0ES
10:30–11:00		*Coffee/tea break*	
11:00–11:30	I	Rachael Beaton	TBD
11:30–11:50	C	Louise Breuval	The Cepheid Distance Scale and its Metallicity Dependence
11:50–12:20	I	Myung Goon Lee	The Tip of the Red Giant Branch as a Cosmological Probe
12:20–13:30		*Lunch*	
13:30–15:30 Chair: Richard de Grijs			
13:30–13:50	C	Gergely Dálya	Tackling the Hubble Tension with Gravitational Waves
13:50–14:10	C	Richard I. Anderson	A 1% Calibration of Long-period Variable Stars for the Extragalactic Distance Scale
14:10–14:30	C	Pierre Kervella	Inspecting the Ladder: the Cepheid Distance to the SN Ia Host Galaxy NGC 5584
14:30–15:00	R	Igor Soszyński	Period–Luminosity Relations in the Local Group of Galaxies
15:00–15:30	P	*Poster sparkler pitches [schedule TBD; chaired by session chair]*	
15:30–16:00		*Coffee/tea break*	
16:00–18:00 Chair: László Kiss			
Session II: Stellar Pulsation Physics			
16:00–16:20	C	Arief Ahmad	Self-excited Pulsations in Global 3D Simulations of Cool, Luminous and Evolved Stars
16:20–16:40	C	Giulia De Somma	New theoretical Period–Luminosity–Colour and Period–Wesenheit relations for Anomalous Cepheids
16:40–17:00	C	Richard de Grijs	New Double Mode Cepheids from the Zwicky Transient Facility Survey
17:00–17:20	C	Saniya Khan	Investigating *Gaia* (E)DR3 Parallax Systematics Using Asteroseismology of Cool Giant Stars Observed by *Kepler*, *K2*, and *TESS*
17:20–17:40	C	Gergely Hajdu	Circumstellar Matter Around RR Lyrae Variables
17:40–18:00	C	Ernst Paunzen	Pulsation of Chemically Peculiar Stars

Tuesday 18 April 2023			
09:00–10:30	**Chair: Michał Pawlak**		
09:00–09:20	C	Mami Deka	A Study of Stellar Photosphere – Hydrogen Ionisation Front Interaction in δ Scuti Stars
09:20–09:40	C	Susmita Das	A Multiwavelength Analysis of BL Her Stars: Models versus Observations
09:40–10:00	C	Géza Csörnyei	How 'Accurate' is 'Precise'? The effect of Period Fluctuations on PL Relations
Session III: Primary period–luminosity relation calibrators in the Milky Way			
10:00–10:30	R	Gisella Clementini	Impact of the ESA *Gaia* mission on the primary Period – Luminosity Relation Calibrators in the Milky Way: Cepheids and RR Lyrae
10:30–11:00		*Coffee/tea break*	
11:00–12:30	**Chair: Tatiana Muraveva**		
11:00–11:30	R	Martin Groenewegen	Primary Period–Luminosity Relation Calibrators in the Milky Way: Cepheids and RR Lyrae – Physical basis, Calibration, and Applications
11:30–11:50	C	Bogumił Pilecki	Cepheids with Giant Companions – A New Abundant Source of Cepheid Astrophysics
11:50–12:10	C	Mauricio Cruz Reyes	A calibration of the Galactic Cepheid luminosity scale based on *Gaia* DR3 open cluster astrometry
12:10–12:30	C	Trentin Erasmo	Cepheid Metallicity in the Leavitt Law (C-MetaLL) Survey. The Metallicity Dependence of Cepheid Period–Luminosity Relations
12:30–13:40		*Lunch*	
13:40–15:30	**Chair: Caroline Huang**		
13:40–14:10	I	Tatiana Muraveva	RR Lyrae stars as distance indicators in the *Gaia* Era
14:10–14:30	C	Laurent Eyer	Exploring the Complexities of Determining Mean Luminosity in Variable Stars: The Impact of Biased Means in Weighted Procedures
14:30–14:50	C	Giuliana Fiorentino	RRLs to Trace Early Galaxy Formation
14:50–15:10	C	Bartłomiej Zgirski	Near-infrared Period–Luminosity Relations for Galactic RR Lyrae based on Photometry from OCA and *Gaia* DR3 Parallaxes
15:10–15:30	C	Ilaria Musella	The Cepheid Based Cosmic Distance Scale: New Constraints from Updated Synthetic Multi-filter Cepheid PL Relations
15:30–16:00		*Coffee/tea break*	
16:00–17:10	**Chair: Martin Groenewegen**		
16:00–16:30	I	Abdelmajid Benhida	Photometric and spectroscopic measurement campaign on the RR Lyr (RR Lyrae) and R Scuti (RV Tauri), at the Oukaimeden Observatory in Morocco
16:30–16:50	C	Weronika Narloch	Period–Luminosity Relations for Galactic Classical Cepheids in the Sloan bands
16:50–17:10	C	Vincenzo Ripepi	On the Origin of Galactic Anomalous Cepheids
17:10–18:00		*Panel discussion (Chair: Patricia Whitelock) [details TBD]*	

Wednesday 19 April 2023			
09:00–12:30 Chair: Gisella Clementini			
Session IV: Disentangling the structural components of the Milky Way			
09:00–09:30	R	Vasiliy Belokurov (virtual)	TBD
09:30–10:00	I	Akiharu Nakagawa	Implication of the Period–Magnitude relation for massive AGB stars and its astronomical applications
10:00–10:30	I	Dorota Skowron	The Structure of the Milky Way from Period–Luminosity Relations
10:30–11:00		*Coffee/tea break*	
11:00–11:20	C	Fran Jiménez-Esteban	Variability properties of the *Gaia* DR3 catalogue of Galactic AGB stars
11:20–11:40	C	Elisa Rita Garro	RR Lyrae as Tracers of Galactic Globular Clusters
11:40–12:00	C	Yi Ren	Granulation in Red Supergiants: The Scaling Relations
12:00–12:30	P	*Poster sparkler pitches [schedule TBD; chaired by session chair]*	
12:30–13:40		*Lunch*	
14:00–17:00		*Budapest sightseeing*	
18:00–20:00	R	Adam Riess	*Public talk at the Hungarian Academy of Sciences*

Thursday 20 April 2023			
09:00–10:40 Chair: Vincenzo Ripepi			
09:00–09:20	C	Matteo Monelli	Towards Homogeneous Distances in the Local Group
09:20–09:40	C	Teresa Sicignano	The Distance Scales of Anomalous and Type 2 Cepheids from Near Infrared Observations in the Magellanic Clouds
09:40–10:00	C	Mónica Taormina	Early-type Eclipsing Binaries as Distance Indicators
10:00–10:20	C	Alexandre Gallenne	Sub-percent Binary Star Masses and Distances from Interferometric Observations
10:20–10:40	C	Maria Tantalo	On the Use of the Mean *J*-band Magnitude of Carbon Stars as a Distance Indicator
10:40–11:10		*Coffee/tea break*	
11:10–12:20 Chair: Dorota Skowron			
11:10–11:40	I	Armando Arellano Ferro (virtual)	RR Lyrae Light Curves and their Role in the Globular Cluster Metallicity and Distance Determination
11:40–12:00	C	Javier Minniti	Using Classical Cepheids to Study the Far Side of the Milky Way Disk
12:00–12:20	C	Antonio Garcia Hernandez	The PL Diagram for dSct: Back in Business as Distance Estimators
12:20–13:30		*Lunch*	
13:30–15:30 Chair: Biwei Jiang			
13:30–14:00	R	Marcella Marconi	Theoretical Stellar Pulsation Physics
Session V: Period–luminosity relations in the nearby universe			
14:00–14:30	I	Anupam Bhardwaj	Period–Luminosity–Metallicity relations for classical pulsators at near-infrared wavelengths
14:30–14:50	C	Zoi Spetisieri	First Direct Measurement of the Stellar Association Bias in the SN Host Galaxy M101
14:50–15:10	C	Kayla Owens	An Independent Analysis of the Multi-Wavelength Cepheid PL Relations in NGC 7250
15:10–15:30	C	Kerdaris Kurbah	A Multi-phase Study of Theoretical and Observed Light Curves of Classical Cepheids in the Magellanic Clouds
15:30–16:00		*Coffee/tea break*	
16:00–18:00 Chair: Rachael Beaton			
16:00–16:20	C	Vincent Hocdé	Metallicity estimations of MW, SMC, and LMC classical Cepheids from the shape of the *V*- and *I*-band light curves
16:20–16:40	C	Shu Wang	Double-mode RR Lyrae Stars – A Robust Distance and Metallicity Indicator
16:40–17:00	C	Felipe Espinoza-Arancibia	Empirical Constraints for the Instability Strip from the Analysis of LMC Cepheids
17:00–17:20	C	Hamidreza Mahani	A Multi-wavelength Monitoring Survey of Variable Stars in the Local Group Galaxies
17:20–18:00		*Panel discussion [topic and members TBD; chaired by session chair]*	

Friday 21 April 2023			
09:00–10:40 Chair: Patricia Whitelock			
Session VI: Non-traditional period–luminosity relations			
09:00–09:30	I	Biwei Jiang	The Period–Luminosity Relation of Red Supergiants
09:30–10:00	I	Michał Pawlak	Period–luminosity relations formed by contact and close binary systems
10:00–10:20	C	Patryk Iwanek	Comprehensive Analysis of Mira-type Stars Variability and the Structure of the Milky Way
10:20–10:40	C	Miora Andriantsaralaza	Distance Estimates for AGB Stars – *Gaia* DR3 Parallax and PL Relation
10:40–11:10		*Coffee break*	
11:10–12:40 Chair: Anupam Bhardwaj			
11:10–11:30	C	Clara Martinez-Vazquez	Breaking the Law: A Segmented Period - Luminosity Relation in delta Scuti Stars
11:30–12:00	I	Michele Trabucchi (virtual)	Long-Period Variables as Distance and Age Indicators in the Era of *Gaia* and LSST
12:00–12:20	C	Caroline Huang	The Mira Distance to M101
12:20–12:40	C	Piotr Wielgórski	Near-infrared Period–Luminosity Relations for Type II and Anomalous Cepheids in the Solar Neighbourhood
12:40–14:00		*Lunch*	
14:00–15:30 Chair: Marcella Marconi			
14:00–14:30	I	Xiaodian Chen	Possible studies on variable stars based on *CSST*
14:30–14:50	C	Dieter Engels	OH/IR Stars and the Period–Luminosity–Relation of Mira Variables
14:50–15:10	C	Fangzhou Ren	An uncharted but valuable distance indicator: Period–luminosity relation of W Ursae Majoris-type contact binaries
15:10–15:30	C	Megan Lewis	Galactic Center Miras: Period–luminosity Relations and Circumstellar Effects
15:30–		*Closing ceremony*	