

IAUS 372: The Era of Multi-Messenger Solar Physics

Date		2-Aug-22			
Time (KST, GMT+9)	Category	Speakers			Type of Participation
		Name	Title		
09:45-10:30	Morning e-Poster; e-talks			<i>See separate program</i>	
10:30-12:00 Morning Oral Session	10:30 - 10:40		G. Cauzzi & A. Tritschler	Welcome	
	Session 1: Early Results from Major Facilities (chair: G. Cauzzi)				
	10:40 - 11:05	Invited	Robert Allen	Parker Solar Probe in the Multi-Spacecraft Era	remote
			Johns Hopkins Applied Physics Lab, JHU, USA		
	11:05 - 11:30	Invited	Bin Chen	Recent Results of Solar Microwave Imaging Spectroscopy	remote
			New Jersey Institute of Technology, USA		
	11:30 - 11:55	Invited	Durgesh Tripathi	The Aditya-L1 Mission of the Indian Space Research Organization	in person
			Inter-University Centre for Astronomy and Astrophysics (IUCAA), India		
12:00-13:30	Lunch				
13:30-15:00 Afternoon Oral Session 1	13:30 - 13:55	Invited	Sami Solanki	The early science phase of Solar Orbiter	in person
			Max Planck Institute for Solar-System Research, Germany		
	13:55 - 14:20	Invited	Thomas Rimmele	The Daniel K. Inouye Solar Telescope: status update and first results	remote
			National Solar Observatory, USA		
	Session 2: Magnetic fields – Generation, Activity and Instabilities (chair: S. Solanki)				
	14:30 - 14:55	Invited	Hindeyuki Hotta	Generation of the solar magnetic field	remote
		Chiba University, Japan			
15:00-15:15	Break				
15:15-16:45 Afternoon Oral Session 2	15:15 - 15:30	Contributed	Allan Sacha Brun	Powering solar-type stars magnetism: how are magnetic cycles established and driven?	in person
			CEA Paris-Saclay, France		
	15:30 - 15:45	Contributed	Ilya Usoskin	Solar cyclic activity reconstruction now extends to cover the last millennium	in person
			University of Oulu, Finland		
	15:45 - 16:00	Contributed	Hanna Strecker	Tracking active regions from the near-Earth to the solar far side by combining SDO/HMI and SO/PHI data	in person
			Instituto de Astrofísica de Andalucía, Spain		
	16:00 - 16:15	Contributed	Bhuvan Joshi	Origin of extreme solar eruptive activity from the active region NOAA 12673 and the largest flare of solar cycle 24	in person
		Udaipur Solar Observatory, India			
	16:15 - 16:40	Invited	Ting Li	Solar flare-CME association	remote
			National Astronomical Observatories, Chinese Academy of Sciences		
16:45-17:30	Afternoon e-Poster; e-talks				

Date

3-Aug-22

Time (KST, GMT+9)	Category	Speakers		Type of Participation	
		Name	Title		
09:45-10:30	Morning e-Poster; e-talks			<i>See separate program</i>	
Session 3: Structure and heating of the outer atmosphere (chair: D. Tripathi)					
10:30-12:00 Morning Oral Session	10:30 - 10:55	Invited	Tim Bastian National Radio Astronomy Observatory, USA	Solar Observations with ALMA: a New Frontier remote	
	10:55 - 11:10	Contributed	Maryam Saberi Institute of Theoretical Astrophysics, Univ. of Oslo,	MHD waves in chromospheric fibrillar structures as observed with ALMA in person	
	11:10 - 11:25	Contributed	Devojyoti Kansabanik National Centre for Radio Astrophysics - Tata Institute of Fundamental Research, Pune, India	Estimating physical parameters of quiet Sun corona using low-frequency spectro- polarimetric radio images in person	
	11:25 - 11:40	Contributed	Yajie Chen School of Earth and Space Science, Peking University, China	Forward Modeling of Solar Coronal Magnetic-field Measurements Based on a Magnetic-field-induced Transition in Fe X remote	
	11:40 - 12:00			<i>Poster & e-talks flash presentations</i>	
	12:00-13:30	Lunch			
	Session 4: Magnetic connectivity: from the star to the astrosphere (chair: S. Gibson)				
13:30-15:00 Afternoon Oral Session 1	13:30 - 13:55	Invited	Aline Vidotto Leiden University, The Netherlands	How has the solar wind evolved to become what it is today? in person	
	13:55 - 14:10	Contributed	Adam Finley Department of Astrophysics, CEA Paris-Saclay France	Stirring the Base of the Solar Wind in person	
	14:10 - 14:25	Contributed	Vishal Upendran Inter University Centre for Astronomy and Astrophysics, India	Exploring the formation of solar wind, switchbacks and Quiet Sun heating in person	
	14:25 - 14:40	Contributed	Marco Romoli Università di Firenze, Italy	First science with Solar Orbiter Metis coronagraph in person	
	14:40 - 14:55	Contributed	Frederic Auchere Université Paris Saclay, France	Solar Orbiter/EUI very wide field observations of the EUV corona in person	
	15:00-15:15	Break			
	15:15-16:45 Afternoon Oral Session 2	15:15 - 15:40	Invited	Christian Moestl Space Research Institute, Austrian Academy of Sciences	The heliosphere in 3D from multi-spacecraft observations remote
15:40 - 15:55		Contributed	Roksoon Kim Korea astronomy and space science institute (KASI)	CME-CME interaction in the interplanetary space: Observation and simulation in person	
15:55 - 16:10		Contributed	Juan C. Martinez Oliveros SSL, University of California Berkeley, USA	2PI steradian radio observations of the 28-10-2021 solar flare in person	
16:10 - 16:25		Contributed	Jinhye Park Department of Astronomy & Space Science, Kyung Hee University Korea	A revisit to the source regions of solar energetic particles by the synchronic potential field source surface model in person	
16:25 - 16:40		Contributed	Tingyu Gou University of Science and Technology of China	Complete restructuring of a magnetic flux rope during a solar eruption remote	
16:45-17:30		Afternoon e-Poster; e-talks			

Date

4-Aug-22

Time (KST, GMT+9)	Category	Speakers		Type of Participation	
		Name	Title		
09:45-10:30	Morning e-Poster; e-talks			See separate program	
Session 5: Turbulence and reconnection at small scales (chair: H. Eklund)					
10:30-12:00 Morning Oral Session	10:30 - 10:55	Invited	Elena Khomenko Instituto de Astrofisica de Canarias, Spain	Understanding solar local dynamo remote	
	10:55 - 11:10	Contributed	Jin-Yi Lee Department of Astronomy & Space Science, Kyung Hee University Korea	Plasma heating along a current sheet in nonequilibrium ionization and non-Maxwellian electron velocity distribution in person	
	11:10 - 11:25	Contributed	Gwangson Choe School of Space Research, Kyung Hee University Korea	Why Are Solar Prominences Filamentary? in person	
	11:25 - 11:40	Contributed	Jongchul Chae Department of Physics and Astronomy, Seoul National University	Detection of Propagating Alfvénic Waves in the Solar Chromosphere in person	
	11:40 - 11:55	Contributed	Sneha Pandit Institute of Theoretical Astrophysics, University of Oslo Norway	Formation of activity indicators in a 3D model atmosphere remote	
	12:00-13:30	Lunch			
	Session 6: Databases and Machine Learning (chair: J. Chae)				
13:30-15:00 Afternoon Oral Session 1	13:30 - 13:55	Invited	Yong-Jae Moon School of Space Research, Kyung Hee University Korea	Application of Deep Learning to Solar and Space Weather Data in person	
	13:55 - 14:10	Contributed	Neal Hurlburt Lockheed Martin Advanced Technology Center, USA	Heliophysics Events Knowledgebase support for Multi-Messenger Solar Physics remote	
	14:10 - 14:25	Contributed	Henrik Eklund Department of Astronomy, Stockholm University, Sweden	Deep neural network estimator for image refinement and estimation on radiation formation heights in person	
	14:25 - 14:40	Contributed	Andrea Diercke National Solar Observatory (USA)	Automatic Extraction of Solar Filaments Using Machine Learning Techniques in person	
	14:40 - 14:55	Contributed	Benedict Lawrence Department of Astronomy & Space Science, Kyung Hee University Korea	Generation of coronal white light images from SDO/AIA EUV images using deep learning in person	
	15:00-15:15	Break			
Session 7: The Multimessenger challenge: combining data and facilities (chair: V. Martinez Pillet)					
15:15-16:45 Afternoon Oral Session 2	15:15 - 15:40	Invited	Clementina Sasso Osservatorio Astronomico di Capodimonte, INAF Italy	Modeling efforts for multi-mission science in person	
	15:40 - 16:05	Invited	Andrew Walsh ESAC, European Space Agency	Coordinating Solar Orbiter Operations: The Story so far and What to Expect Next in person	
	16:05 - 16:30	Invited	Alexandra Tritschler National Solar Observatory (USA)	DKIST Coordination: Status and Current Strategies remote	
	16:30 - 16:45	Contributed	Yang Su Purple Mountain Observatory, Chinese Academy of Sciences (CAS)	Progresses of ASO-S mission remote	
	16:45-17:30	Afternoon e-Poster; e-talks			

Date**5-Aug-22**

Time (KST, GMT+9)		Category	Speakers		Type of Participation
			Name	Title	
			IAUS 372 Plenary Session (chair: G. Cauzzi)		
08:15-09:45 Plenary Session	08:15 - 09:15	Plenary	Valentin Martinez Pillet	Challenges and opportunities in solar and heliospheric physics at the dawn of the multi-messenger era	In-person
			National Solar Observatory (USA)		
	09:15 - 09:45		Round Table Discussion		