

## Solar Polarization Workshop 10 Program (v20221031)

(\*) Keynote talk  
 (\*\*) Review talk  
 (R) Remote presentation

### Monday 7 Nov

12:30	13:30	Registration			
<i>Chair: Yukio Katsukawa</i>					
13:30	13:40	Opening			
13:40	14:20	(**)	L. Bellot Rubio	S1 EST: The future facility for accurate high-spatial resolution spectropolarimetry	01_1107_Bellot
14:20	14:40	(R)	N. Hurlburt	S1 Early laboratory testing of a photonic magnetograph	02_1107_Hurlburt
14:40	15:10	(*R)	Z. Xu	S1 Coronagraph-COronal Magnetism and Plasma ASsembled Scopes(COMPASS)	03_1107_Xu
15:10	16:10	Break & Poster (60 min)			
16:10	16:40	(*)	D. Song	S1 The CLASP2 and CLASP2.1 missions for measuring chromospheric magnetic fields	04_1107_Song
16:40	17:00		S. K. Dubey	S1 Multi-Application Solar Telescope (MAST) : Polarimeter and telescope polarization characterization	05_1107_Dubey
17:00	17:20	(R)	Z. Qu	S1 Recent Progresses in Shaping the FASOT	06_1107_Qu
17:20	17:50	(*)	D. Orozco Suárez	S1 The polarimetric and helioseismic imager of solar orbiter	07_1107_Orozco

### Tuesday 8 Nov

<i>Chair: Kiyoshi Ichimoto</i>					
9:00	9:40	(**)	J. Trujillo Bueno	S3 Highlights of observational and theoretical high-precision spectropolarimetry	08_1108_Trujillo
9:40	10:00	(R)	T. Schad	S3 Non-symmetric Radiative Excitation of Polarized Lines in the Upper Atmosphere	09_1108_Schad
10:00	10:20		A. Vicente Arelvalo	S3 Formation of the polarized solar He I 10830 A line	10_1108_Vicente
10:20	10:50	Break & Poster (30 min)			
10:50	11:20	(*)	E. Alsina Ballester	S3 Modeling the polarization of the Na I and K I D lines	11_1108_Alsina
11:20	12:10	Poster flash talk (1)			
		(R)	Y. Huang	S1 Development of DST Spectro-Polarimeter at Hida Observatory	12_1108_Huang_p
		(R)	T. Sakurai	S1 Calibration and Data Analysis Pipeline of the Infrared Spectro-Polarimeter at NAOJ/Mitaka	13_1108_Sakurai_p
		(R)	J. Batmunkh	S1 Building an efficient compression method for solar spectro-polarimetry data accumulated by Hinode/SP	14_1108_Batmunkh_p
		(R)	X. Sun	S4 SpIn4D: Spectropolarimetric Inversion in Four Dimensions with Deep Learning	15_1108_Sun_p
		(R)	T. Kawate	S5 A tabletop device for investigating spectropolarimetric responses to anisotropic/magnetized plasmas	16_1108_Kawate_p
			Y. Hanaoka	S2 Polarization of the Corona Observed During the 2017 and 2019 Total Solar Eclipses	17_1108_Hanaoka_p
			R. T. Ishikawa	S2 Spectral line broadening associated with the turbulence in fading granules	18_1108_Ishikawa_p
			J. Jurcak	S2 The stability of sunspots and pores related to the magnetic field properties	19_1108_Jurcak_p
12:10	13:40	Lunch Break (90 min)			
<i>Chair: Rebeca Centeno</i>					
13:40	14:10	(*R)	T. del Pino Alemán	S3 Magnetic field diagnostics with UV spectropolarimetry	20_1108_del_Pino
14:10	14:30		D. Afonso Delgado	S3 Exploring the UV solar spectrum: the polarization of Fe II lines between 250-280 nm.	21_1108_Afonso
14:30	14:50	(R)	J. Zhao	S3 Simulating the Solar Corona in the Forbidden and Permitted Lines with Forward Modeling	22_1108_Zhao
14:50	15:10		S. Hebbur Dayananda	S3 P-CORONA : A new forward modeling code to study the polarization of solar coronal lines	23_1108_Hebbur
15:10	16:10	Break & Poster (60 min)			
16:10	16:30	(R)	M. Derouich	S3 Comprehensive data on atom+hydrogen and atom+electron collisions for spectroscopic and spectropolarimetric applications	24_1108_Derouich
16:30	17:30	Poster flash talk (2)			
		(R)	A. Korpi-Lagg	S1 SUNRISE III: The Solar Atmosphere in 3D and High Resolution	25_1108_Korpi_p
		(R)	D. Kansabanik	S1 Tackling the unique challenges for low-frequency solar polarimetric calibration and imaging for Sun with the Murchison Widefield Array	26_1108_Kansabanik_p
		(R)	S. Dey	S2 First detailed polarimetric study of a group of type-III solar radio bursts with the Murchison Widefield Array	27_1108_Dey_p
		(R)	P. Majee	S2 First detailed polarimetric study of a type II solar radio burst with the Murchison Widefield Array	28_1108_Majee_p
		(R)	S. Riva	S3 Suitability of the CRD approximation for the RIII redistribution matrix in the RT modeling of scattering polarization	29_1108_Riva_p
		(R)	M. Derouich	S3 Depolarization of solar molecular lines by collisions with neutral hydrogen atoms and with electrons	30_1108_Derouich_p
		(R)	N. Guerreiro	S3 Theoretical modelling of the scattering polarisation signal of the Ca I 4227 A line accounting for angle-dependent PRD effects and bulk velocities	31_1108_Guerreiro_p
		(R)	A. V. Sukhorukov	S3 3D RT Modeling of the Scattering Polarization in the Wings of Mg II h&k	32_1108_Sukhorukov_p
		(R)	M. E. M. Gangi	S5 SPOTS - SpectroPolarimetric Observations of T Tauri Stars: preliminary results	33_1108_Gangi_p
			Y. Katsukawa	S1 Spectro-polarimetric capability of SUNRISE III SCIP	34_1108_Katsukawa_p
			Y. Hashimoto	S2 Spectropolarimetry of solar prominences in He I 10830 Å with the Domeless Solar Telescope at Hida observatory	35_1108_Hashimoto_p

**Wednesday 9 Nov***Chair: Krishnappa Nagaraju*

9:00	9:30 (*)	F. Zeuner	S2 Hanle rotation finally revealed in Sr I 4607	36_1109_Zeuner
9:30	9:50	Y. Katsukawa	S2 Polarization measurement of the O V 121.83 nm intercombination line with CLASP	37_1109_Katsukawa
9:50	10:10	R. Ishikawa	S2 Observational Evidence for the Hanle and Magneto-Optical Effects in the Polarization of the Mg II h & k Lines Observed by CLASP2	38_1109_Ishikawa
10:10	10:40	Break & Poster (30 min)		
10:40	11:20 (**)	R. Centeno	S4 Magnetic field diagnostic for the Solar Chromosphere	39_1109_Centeno
11:20	11:40	J. Jurcak	S4 Mapping the magnetic field azimuth in the chromosphere	40_1109_Jurcak
11:40	12:00	X. Zhou	S2 Synthetic Ca II 8542Å Stokes profile of chromospheric magnetic reconnection in emerging flux region	41_1109_Zhou
12:00	13:30	Lunch Break (90 min)		

*Chair: Ernest Alsina Ballester*

13:30	14:00 (*)	Y. Kawabata	S2 Chromospheric magnetic field in active regions	42_1109_Kawabata
14:00	14:20	H. Mathur	S2 Does the H $\alpha$ Stokes V profiles probe the chromospheric magnetic field? An observational perspective	43_1109_Mathur
14:20	14:40	A. G. M. Pietrow	S2 Inference of the chromospheric magnetic field configuration of solar plage using the CaII 8542 angstrom line	44_1109_Pietrow
14:40	15:00	K. Nagaraju	S2 Velocity and Magnetic Field of Outflows from a Magnetic Reconnection Event	45_1109_Nagaraju
15:00	15:50	Break & Poster (50 min)		
15:50	16:20 (*)	M. Goto	S5 Electron temperature anisotropy explored by the impact polarization of the Lyman-alpha line in fusion plasma	46_1109_Goto
16:20	16:40 (R)	L. Belluzzi	S3 Modeling scattering polarization accounting for angle-dependent PRD effects	47_1109_Belluzzi
16:40	17:10 (*R)	G. Janett	S3 Multi-fidelity preconditioning of Krylov solvers for linear transfer problems of polarized radiation	48_1109_Janett
17:10	17:30	P. Benedusi	S3 Scalable Matrix-free Solver for 3D Polarized Radiative Transfer in Stellar Atmospheres	49_1109_Benedusi
17:30	17:50 (R)	M. Sampoorna	S3 Influence of Thomson Scattering Redistribution on Resonance Line Polarization	50_1109_Sampoorna

**Thursday 10 Nov***Chair: Jan Jurcak*

9:00	9:30 (*R)	T. Anan	S2 The impact of He I 1083 nm spectropolarimetry in solar physics	51_1110_Anan
9:30	9:50	D. Yamasaki	S2 Investigation of the magnetic field structure of dark filaments by using a spectro-polarimetric observation with He I 1083 nm	52_1110_Yamasaki
9:50	10:10	S. Castellanos Duran	S2 Superstrong magnetic fields in bipolar light bridges	53_1110_Castellanos
10:10	10:30	J. Okamoto	S2 The strongest magnetic fields in sunspots and their statistical properties	54_1110_Okamoto
10:30	11:00	Break & Poster (30 min)		
11:00	11:30 (*)	G. Barnes	S4 An Overview of Disambiguation Techniques	55_1110_Barnes
11:30	11:50	L. Bellot Rubio	S2 Unipolar and bipolar magnetic flux appearance in the quiet Sun internetwork	56_1110_Bellot
11:50	12:10 (R)	A. Kaithakkal	S2 Traits of a quiet Sun Ellerman Bomb	57_1110_Kaithakkal
12:10	13:40	Lunch Break (90 min)		

*Chair: KD Leka*

13:40	14:10 (*)	D. Kuridze	S2 Spectropolarimetry of flaring active region	58_1110_Kuridze
14:10	14:30	R. Yadav	S2 Stratification of physical parameters in a C-class solar flare using multi-line observations	59_1110_Yadav
14:30	14:50	A. B. Griñón Marín	S2 A new view into flaring sunspots	60_1110_Grignon
14:50	15:10 (R)	D. Kansabanik	S2 Recent Developments in Low-frequency Spectro-Polarimetric Snapshot Imaging Studies of the Radio Sun	61_1110_Kansabanik
15:10	15:30 (R)	M. Murabito	S2 The formation and disappearance of penumbra	62_1110_Murabito
15:30	16:30	Break & Poster (60 min)		
16:30	17:10 (**R)	S. Bagnulo	S5 Magnetism in isolated white dwarfs	63_1110_Bagnulo
17:10	17:40 (*)	J. Stepan	S4 Novel framework for the three-dimensional NLTE inverse problem	64_1110_Stepan

**Friday 11 Nov***Chair: Ayumi Asai*

9:00	9:30 (*)	A. Pastor Yabar	S4 Spectropolarimetric inversions including magneto-hydrostatic constraints	65_1111_Pastor
9:30	9:50 (R)	S. Yang	S4 A fast approach to calibrate the vector magnetic field from the polarization measurement in Huairou Solar Observing Station	66_1111_Yang
9:50	10:10	M. Kubo	S4 Comparison of polar magnetic fields derived from MILOS and MERLIN inversion for Hinode/SOT-SP data	67_1111_Kubo
10:10	10:30 (R)	Y. Liang	S4 The reliable noise reduction method for the Stokes spectral profiles	68_1111_Liang
10:30	11:00	Break & Poster (30 min)		
11:00	11:30 (*)	C. J. Díaz Baso	S4 Unlocking the potential of deep learning for the analysis of spectropolarimetric observations	69_1111_Diaz
11:30	11:50	J. Sinjan	S2 SO/PHI-HRT SDO/HMI Cross-Calibration and the True Solar Magnetic Flux	70_1111_Sinjan
11:50	12:30 (**)	K. Ichimoto	S2 Spectro-polarimetry of the sun from space and ground: : What we learned and issues for the future	71_1111_Ichimoto
12:30		Adjourn		