

German-Spanish WE Heraeus Seminar Interdisciplinary Physics of the Sun, final program (update 05.06.2025)

Day	Sunday 29.06.	Monday 30.06.	Tuesday 01.07.	Wednesday 02.07.	Thursday 03.07.	Friday 04.07.
Morning 1 (8:30 – 10:30)		Daniel/Aldo/Markus: Opening	Rachel Howe (Birmingham): Helioseismology at low-degree: BiSON results through solar cycles	Hector Socas-Navarro (La Laguna): European Solar Telescope	Maria Bergemann (Heidelberg): Solar elemental abundances	(On Friday, start at 8:50)
		Elena Khomenko (La Laguna): Solar magneto- convection Tanayveer Singh Bhatia (Göttingen): Sunspot substructure affecting penumbra formation	Fernando Moreno Insertis (La Laguna): Magnetic flux cancellation from the solar photosphere to the corona	Alessandra Guglielmetti (Milano): Solar fusion cross sections III: a nuclear physics perspective	Michael Wurm (Mainz): Solar neutrino measurements	Manuel Collados (La Laguna): Spectropolarimetry with VTT and GREGOR
		Poster pitches #1 - #14	Poster pitches #62 - #70	Tom Van Doorsselaere (Leuven): Global coronal models driven with Alfvén and kink waves	Yoshiki Hatta (Japan / Göttingen): Solar neutrino flux fluctuations caused by gravity modes	Carsten Denker (Potsdam): Observations of solar magnetic activity
Coffee		Coffee	Coffee	Coffee	Coffee	Coffee
Morning 2 (10:50 – 12:30)		Bernd Heber (Kiel): Solar Energetic Particles	Frank Stefani (Dresden): Solar magnetohydrodynamics	Sami Solanki (Göttingen): Solar magnetic fields	Stefan Krückeberg (DFG): Priority Programmes (Schwerpunktprogramme)	Petri Käpylä (Freiburg): Large- scale numerical simulations of the Sun
		Gael Buldgen (Liège): Dynamical processes in the Sun and non-standard solar models	Francesco Villante (L'Aquila): The response of the Sun to Modifications of its Internal Properties	Aldo Serenelli (Barcelona): The Standard Solar Model	Discussion	Yago Herrera (Barcelona): Standard Solar Model and variations with Kernels method Daniel/Aldo/Markus: Closing
Lunch		Lunch	Lunch	Lunch	Lunch	Lunch
Afternoon 1 (13:30 – 15:30)		Taisuke Nagayama (Sandia): Understanding Solar Opacity	Poster session	Excursion	Michèle Heurs (Hannover): Deutsches Zentrum für Astrophysik and gravitational wave detections	
		Alba Formicola (Rome): Laboratory Underground for Nuclear Astrophysics	Poster session	Excursion	Natalie Krivova (Göttingen): Past solar activity	
		Poster pitches #15 - #22	Poster session	Excursion	Huidong Hu (CAS China): Lateral Deformation of Coronal Mass Ejections	
Coffee		Coffee	Coffee	Excursion	Coffee	
Afternoon 2 (16:00 – 18:00)	Registration (17:00 – 21:00)	Daniel Müller (ESA): Solar Orbiter: Science Highlights and Mission Status	Eliana Masha (Dresden): Solar pp-chain reactions studied underground	Excursion	Hardi Peter (Göttingen): The Corona of the Sun and its connection to the surface	
		Nazaret Bello Gonzalez (Freiburg): Small-Scale Structure in the Lower Solar Atmosphere	Juan Manuel Borrero (Freiburg): Solar spectropolarimetry	Excursion	Michael Sigwarth (Jena): TauSol Imaging Spectropolarimeter Alvaro Jesús Quero Ballesteros (Granada): Cosmic-ray neutrons	
		Poster pitches #26 - #58	Gianluca Imbriani (Naples): $^7\text{Be}(\text{p},\gamma)^8\text{B}$ and $^3\text{He}(\alpha,\gamma)^7\text{Be}$	Excursion	Matthias Schubert (Freiburg): First solar line scan with the Visible Tunable Filter VTF at DKIST	
Dinner	Dinner (18:00)	Dinner	Dinner	Dinner	Dinner	

Time allocated: Invited lectures 40 + 10 min. (talk + discussion). - **Contributed talks (blue)** 15 + 5 min. - Poster pitch 2 min. per poster.

German-Spanish WE Heraeus Seminar [Interdisciplinary Physics of the Sun](#), list of poster presentations.

Posters should be A0 size and can be displayed for the entire duration of the workshop. In addition, there will be a dedicated poster session on Tuesday afternoon. Poster presenters can show one slide in the plenum as a “poster pitch”, see the program for your time slot.

- #1 Duresa Temaj (Göttingen): Towards a reconstruction of the annual solar Irradiance over the past 9 millennia
- #3 Janna Martens (Kiel): Correlation of Microwave Signatures in Solar Flares and Near-Earth Solar Energetic Particle Spectra
- #6 Ulrich von Kusserow: Space Weather and Earth Climate
- #9 Richard Jean-Guillaume (France): Radial and Latitudinal Structure of the Sun: From the Core to the Tachocline and from Equator to Poles
- #10 K M Hiremath (India): Century scale variation of the sun's radius
- #12 Harhad Wafia (Algiers): Influence of the Horizontal Magnetic Field on Rayleigh-Taylor Instability in Low-Altitude Solar Prominence Configurations
- #14 Sanghita Chandra (Göttingen): Solar Spicules and RBEs/RREs in MURaM simulations
- #15 Khalil Daiffallah (Algiers): f-mode travel-time signature of sunspot models and plages
- #16 Sugandhi Sharma (India): Unveiling the Solar Nexus: An Interdisciplinary Inquiry into the Dynamics of Our Star
- #17 Gwangson Choe (Korea): How Much Are We Missing? Observational Limits on Magnetic Helicity Transport in Emerging Magnetic Structures
- #18 Aswathi Krishnan Kutty (Göttingen): Simulation of sunspots in the chromosphere
- #20 Gaurav Saxena (India): Spectral Distribution Approach to Proton-Capture Reactions Relevant to Solar Fusion
- #21 Max McMurdo (Leuven): Uniturbulence and Alfvén wave solar model
- #22 Helena Vila Crespo (Göttingen): Initial steps in the inference of horizontal velocity fields in the solar atmosphere
- #26 Daye Lim (Leuven): Quasi-periodic pulsations in extreme-ultraviolet brightenings
- #29 Hanna Strecker (IAA Spain): Active region evolution from different viewpoints
- #30 Hemanth Pruthvi (Jena): PyAstroPol: A Python Package for Polarization Ray Tracing
- #54 Peter Hempel (Dresden): Gamma-ray angular distribution of the $^3\text{He}(\alpha, \gamma)^7\text{Be}$ reaction
- #57 Ajay Kumar Yadav (Göttingen): Using modern data to understand historical solar observations
- #58 Andres Vicente Arevalo (Freiburg): 3D inversions of solar prominences
- #62 Xiang Li (Göttingen): Stereoscopic disambiguation of solar vector magnetic fields using observations from SO/PHI and SDO/HMI
- #63 Konrad Schmidt (Dresden): New developments in underground nuclear astrophysics
- #64 Eva Sola-Viladesau: Heating, magnetism and geometry of top small-scale coronal loops
- #66 Robert Kamlah (AIP): Multi-line spectroscopy of a sunspot with a strong light bridge
- #67 Vigeesh Gangadharan (Freiburg): The Daniel K. Inouye Solar Telescope observations of shock waves triggered by magnetic vortices
- #70 Ashish Mishra (Dresden): MRI in Rotating Flows: Implications for the Solar Tachocline and Dynamo Processes