

## ESPD Elections

With the ESPM comes the renewal of the board of the European Solar Physics Division (ESPD) of the European Physical Society (EPS). The board members are elected for three years, until the following ESPM meeting.

### Election for ESPD President

#### *Candidates:*

**Patrick Antolin** (Northumbria University, UK), *current board member*

Solar physics is in a privileged position in astrophysics where phenomena can be uniquely resolved in time and space. Various solar phenomena can be used as stepping stones to understand other analogue phenomena in the universe. Moreover, we are now in a golden age of solar observations with Parker Solar Probe, Solar Orbiter, UCoMP, CHASE, ASO-SP, ADITYA, DKIST, and other various solar projects en route to commissioning phase such as MUSE and EUVST. As President of the ESPD I aim to strengthen our ties with the European Physical and Astronomical Societies, further promote solar physics within the astrophysical community and our community's achievements to the young and future generations. I aim to foment the connection between theoreticians, modellers and observers in the field, and between the different solar physics communities across the globe. I am an advocate for promoting the young researchers in the field and EDI values in the community. As President I will pursue the organisation of the triennial ESPM meeting, the biennial ESPD summer school and collaboration with non-europeans entities in the organisation of scientific events.

I am an Associate Professor at Northumbria University. I obtained my PhD at Kyoto University (2009) and the University of Oslo (2012). I am an expert in numerical modelling (incl. parallel computing), forward modelling (the synthesis of observational diagnostics from numerical simulations) and solar observations (with both, space-based and ground-based observatories). My research focuses on solar atmospheric phenomena and in particular coronal heating (MHD waves and magnetic reconnection), and coronal cooling processes (coronal rain and prominences, thermal instabilities and non-equilibrium). I am particularly interested in cross-disciplinary science, linking solar physics phenomena with that at much larger scales in the universe. I have an established large international network of collaborations, currently contributing in particular to the Solar Orbiter / EUI Consortium, the Multi-slit Solar Explorer "MUSE" mission and the EUVST (Solar-C). I have also led various ISSI teams and organised international conferences. I have experience in PhD supervision, teaching and outreach.

### Election for the ESPD Board

#### *Candidates:*

**Krzysztof Barczynski** (Physical-Meteorological Observatory in Davos (PMOD), ETH in Zurich, Switzerland)

I am an instrumental scientist and postdoctoral researcher at the Physical-Meteorological Observatory in Davos (PMOD) and the Federal Institute of Technology (ETH) in Zurich, Switzerland. In 2013, I graduated with an MSc in Astronomy at the Jagiellonian University in Krakow (Poland). From 2013 to 2017, I held a PhD fellowship at the International Max Planck Research School at the Max Planck Institute for Solar System Research (MPS) in Göttingen. In 2017, I successfully defended

my PhD thesis in Physics (Heliophysics) at the University of Göttingen. In 2018 and 2019, I worked as a postdoctoral researcher at the Paris Observatory and Sorbonne University (France). In 2020, I joined ETH. My work as an instrumental scientist focuses on the Solar Orbiter (specifically the EUI and SPICE instruments), Solar-C and M-MATISSE missions. I am a member of the Science Working Group for Solar-C and the Science Study Team for M-MATISSE.

My primary scientific interest focuses on the relationship between the dynamics of solar atmospheric structures and the formation of solar wind. More broadly, I am interested in eruptive events in the solar atmosphere from small- to large scale. In my research, I use both simulations and observational data. I am passionate about organising observations. I served as an IRIS planner and I am currently the Solar Orbiter Observing Plan (SOOP) coordinator. I have a strong interest in coordinated observations, which led me to be part of the team that organized the first two successful coordinated observation campaigns between Solar Orbiter and DKIST.

I am a candidate for membership on the ESPD Board, where I aim to enhance collaboration among researchers from various countries, grown connections among early-career scientists, and promote solar physics in Europe and beyond. I am also highly interested in enhancing the role of multidisciplinary collaborations, particularly in the exchange of data analysis and simulations methods.

**Arkadiusz Berlicki** (University of Wrocław, Center of Scientific Excellence - Solar and Stellar Activity, Wrocław, Poland)

I'm a researcher at the University of Wrocław (UWR) with more than 30 years of experience in the field of solar physics. My work is concentrated in data analysis and interpretation of spectral observations of solar flares, Ellerman bombs, active regions, prominences, filaments and other solar active phenomena using NLTE radiative transfer codes. I'm familiar with ground-based solar observations (SST/CRISP, DST/IBIS, Wrocław - MSDP, Themis, Ondřejov spectrograph and others) and using high-quality imaging spectroscopic data of solar active events for the modeling of their physical parameters, structure and dynamics. Recently, we use solar ALMA data as a novel tool for the chromospheric diagnostics. I have also an experience in leading of research teams, I coordinated the scientific activity of two Polish teams working within European Commission FP7 projects SOLARNET and F-CHROMA, as a project Co-investigator. In addition, I also coordinated work in the project of European Space Agency (ESA) dedicated to hardware development of optical elements (mirrors) for Metis coronagraph onboard Solar Orbiter mission. Currently, I'm a head of the Solar Physics and Space Physics Department (Astronomical Institute, University of Wrocław, Poland).

I'm interested in the ESPD Board participation in order to develop more intense international collaboration between scientists involved in observations, theoretical simulations and groups operating different ground-based and space instruments observing in multi-wavelengths domain, from radio to X-ray. As a member of ESPD board I plan to encourage young generations to enter solar physics field and to show how interesting it is. In addition, it is worth to promote solar physics and space weather topics among the general public and to stress that humanity has a unique opportunity to study our star from such a close distance, which help us to understand the Universe as a whole.

**Jaime de la Cruz Rodriguez** (Institute for Solar Physics, Stockholm University, Sweden)

I am an Associate Professor at Stockholm University, where I teach and carry out my research activities. I obtained my PhD in Dec 2010 at the same University. I would consider myself an expert in NLTE inversion methods, polarized radiative transfer and in the interpretation of high spatial-resolution chromospheric data. My group's research is mostly focused in helping to solve the

chromospheric heating problems and we have pushed inversion techniques to new limits in order to reconstruct the highest resolution semi-empirical models of the solar chromosphere that are currently available. I have been awarded the Starting (2017) and Consolidator (2023) grants from the European Research Council that have and will continue supporting my research activities in the coming years.

I want to contribute to the continuous development European Solar Physics in a better way than I presently do. As a community, we need to keep supporting good young scientist in our field and make sure that Europe remains an attractive place for them to develop and establish themselves in the longer term. There are many efforts working towards that goal, with EST perhaps being one of the foremost initiatives to keep observational solar physics at the forefront. The ESPD also plays an influential role organizing a prestigious meeting that unites our community and awarding prizes to excellent scientists. To that end, I think I can also contribute to the panel activities with insight in my field of research, which represents a large community in Europe.

**Suzana de Souza e Almeida Silva** (University of Sheffield, UK)

My name is Suzana de Souza e Almeida Silva, and I am honoured to stand for election to formally contribute to the European Solar Physics Division (ESPD) as a Board member. My primary objective aligns with the ESPD's mission: to advance the study of the Sun, disseminate key solar physics research findings to the public, and promote the integration of solar research with other branches of physical sciences. Additionally, I have been a PDRA member of the UK Solar Physics (UKSP) Council for the last two years, gaining a profound understanding of our field's needs and challenges. My journey in interdisciplinary research, from gravitational physics to advanced data analysis for solar studies, uniquely positions me to bridge the gap between solar physics and other scientific communities. As the Project leader of an ISSI team dedicated to expanding forefront techniques of fluid mechanics to solar atmospheric flows, I am well-equipped to create opportunities to foster collaboration and innovation in interdisciplinary initiatives.

I am particularly excited about the opportunity to contribute to organising a series of yearly intensive topical workshops and schools. I intend to collaborate by designing such events to enhance collaboration, help emerging talents, and push the boundaries of our current understanding of solar physics. I have led a similar initiative as one of the main organisers of the SolarMHD conferences in 2021 and 2024, where early career researchers and PhD students had the opportunity to participate in discussions and hands-on interactive sessions with renowned scientists. My five years of experience as a science communicator at the University of Brasilia Observatory provided me with a solid background in outreach, which has taught me how to turn scientific research into something exciting and easy to understand for everyone. This is really important when sharing our community's successes and the value of our research and findings. My international experience at various research institutes (INPE, MPS, ITA, UoS) has equipped me with the listening skills necessary to understand and advocate for the interests of our ESPD community. I hope to serve as a Board Member of the ESPD, where I am confident I can make a meaningful contribution.

**Reetika Joshi** (University of Oslo, Norway)

I am a postdoctoral researcher at the Rosseland Centre for Solar Physics, University of Oslo, Norway. Since 2016, I have been actively involved in analyzing data from various solar observation missions, including SDO, IRIS, STEREO, and LASCO, and more recently, from the Swedish 1-meter Solar Telescope (SST). My research primarily focuses on small-scale solar activity, such as solar jets and small flares. I have provided observational evidence supporting theoretical models of solar jets

originating from emerging magnetic flux regions. Recently, we have developed a more comprehensive understanding of solar jets emerging from anemone-type magnetic topologies. I was recently selected to participate in the guest investigator program at the Royal Observatory of Belgium, which grants me access to Solar Orbiter datasets and allows me to develop proficiency in handling observational data from multiple instruments. Additionally, I have served as a Science Planner for NASA's IRIS mission, where I was actively involved in selecting observational targets and coordinating with other observatories. These experiences have given me valuable opportunities to coordinate observations between space-borne and ground-based platforms.

I am interested to actively contribute to the European solar physics community by fostering collaborations and facilitating knowledge transfer among researchers from different universities across various fields. Serving on the ESPD board would provide me an ideal platform for this, enabling me to leverage my professional and research experience to support the needs of the ESPD and to advocate for the general challenges in the community.

**Ioannis Kontogiannis** (Leibniz Institute for Astrophysics Potsdam (AIP), Germany), ***current board member***

I am a researcher at the Leibniz-Institute for Astrophysics Potsdam (AIP), in Germany. My current research is on the emergence of the magnetic flux and the evolution of active regions. My research experience also includes the prediction of flares and CMEs, the dynamics of the chromospheric structures of the quiet Sun (mottles, fibrils, and swirls), the small-scale eruptive activity (flux emergence, minifilament eruptions) and the interaction between waves and the small-scale magnetic field. I also have a long and continuing professional experience in public outreach, including science shows, workshops, talks, and scientific journalism. I am interested in participating actively in the European solar physics community, contributing to the cultivation of collaborations and knowledge transfer between groups of different institutes and countries as well as across fields/subfields. Renewing my participation to the ESPD board would allow me to support the needs of the ESPD and address the challenges and difficulties that scientists and communities face across Europe.

**Marianna Korsos** (The University of Sheffield, UK)

I am currently a Leverhulme Early Career Fellow at University of Sheffield, UK, where I have the privilege of continuing the research I began during my dual PhD at University of Sheffield (2019) and Eötvös Loránd University (2020) in Hungary. My research focuses on the prediction of solar flares and coronal mass ejections, with particular interest in understanding how active regions evolve towards eruptions and how we can develop better prediction methods. Lately, my work has also expanded to include medium-term solar eruption prediction, aiming to deepen our understanding of solar activity, especially in relation to active longitude and magneto-Rossby waves. I believe that by combining insights from both medium-term and short-term predictions, we can build a more reliable framework for anticipating solar eruptions. Beyond my research, I have always found great joy in public outreach. Working with amateur astronomers has been particularly rewarding, as their passion and different perspectives constantly inspire me. I have also recently started collaborating with an artist who draws inspiration from solar observations, and it has been wonderful to see his work exhibited across Europe. These experiences have motivated me to continue sharing the importance of solar physics with the wider public.

I am also involved in the solar physics community as the Deputy Chair of the UK Solar Physics Council. I was also founding member of the European Space Weather and Space Climate Association (E-

SWAN). Currently, I serve as secretary of the Operational Activities, Infrastructure, Data, and Models working group of E-SWAN. I see solar physics as a field with immense potential, where we can uniquely resolve phenomena in both time and space. My hope is to contribute to promoting solar physics within the astrophysical community and to inspire the next generation of scientists to explore this fascinating area of study. Being a member of the ESPD board would be the perfect opportunity to achieve this.

**Stanislav Gunar** (Astronomical Institute of the Czech Academy of Sciences, Czech Republic), *current board member*

I'm a research scientist with 20 years of experience in the field of solar physics. My main focus is radiative transfer modelling and the study of solar prominences. These research topics bring together imaging and spectroscopic observations obtained from space and ground and numerical simulations of prominence magnetic field, plasma and radiation. I'm also one of the lead co-investigators of the PROBA-3/ASPIICS formation-flying coronagraph that will bring new, unprecedented observational capabilities to the solar physics community. I'm an active member of the current ESPD Board, and now I stand for election for the second term as the board member. My aim is to further strengthen the integration between the solar physics communities within Europe and between Europe and the world.

**Nancy Narang** (Royal Observatory of Belgium, Belgium)

I am a research scientist at the Solar-Terrestrial Centre of Excellence (STCE-SIDC) of the Royal Observatory of Belgium (ROB). My research interests are observations of fine-scale structures in the solar atmosphere to understand the coupling and mass-energy transfer between different layers of the solar atmosphere. In the past I have worked at the Indian Institute of Astrophysics as a PhD student, and at the University of Oslo as a postdoctoral fellow. I have been using solar observations from multiple observatories such as IRIS, Hinode, SDO, SST, ALMA and Solar Orbiter for my research. Currently, I am working with the EUI (Extreme Ultraviolet Imager aboard Solar Orbiter) team of ROB (PI institute of EUI). I also take active part in the EUI Guest Investigator Programme of the ROB to support researchers worldwide with their EUI related research activities. I am currently a junior member of the International Astronomical Union. I have served as a member of the local organising committee for the IAU Symposium-340 in 2018 and the IRIS-10 meeting in 2019. I was also a member of the online support team for ESPM-16 in 2021 which was fully online due to the covid pandemic. As a member of the ESPD board, I would like to support developing close collaborations between solar observers and users of different space-based and ground-based observation facilities. We can promote such collaborations by supporting and organising joint-multi-observatory meetings/workshops within Europe. Such coordinations help us to maximise the research output from the observations and encourage the researchers to support the maintenance and improvements in the available facilities and participate in the upcoming missions. My participation in the ESPD board will give me the opportunity to contribute to fostering collaborations and promoting solar and heliospheric research within Europe and internationally, particularly to encourage students into Astrophysics research and education.

**Sophie Masson** (Observatoire de Paris - Laboratoire de Physique des Plasmas, France), *current board member*

I'm a solar physicist with more than 10 years of experience. My research focuses on the dynamics of the solar corona using tridimensional magnetohydrodynamics simulations of solar eruptions. My expertise also includes the study of solar energetic particles, mainly on their acceleration, their interplanetary injection and their propagation using multi-instruments analysis and diagnostic of energetic particle events. This multidisciplinary approach based on the combination of multi-instruments analysis and numerical simulations drives me to have a large and integrated view of solar energetic particles issue in the inner heliosphere. I received a PhD fellowship from the French government department of defense (DGA) at Paris Observatory. I was a post-doc at NASA Goddard Space Flight Center with a NASA Postdoctoral Program fellowship. I'm now a permanent researcher at Paris Observatory working at the Plasma Physics Laboratory. I'm a member of the current ESPD board serving as treasurer. I'm a candidate to serve a second term as member of the ESPD Board in order to help federate and animate the European solar physics community. Being a member of the board will allow me to participate actively to the promotion and development of the Solar physics European activity.

**Mariarita Murabito** (INAF - Osservatorio Astronomico di Roma, Italy)

I am an early-career researcher of the INAF Istituto Nazionale di Astrofisica at Osservatorio Astronomico di Roma, in Italy. My research activity focuses on photospheric and chromospheric physics, mainly studied by using high-resolution observations from ground- and space-based telescopes. In particular, since my PhD work defended in 2018, I have investigated the formation, structure and evolution of penumbrae, the small-scale interaction between emerging and pre-existing magnetic fields, and MHD waves, along with elemental abundances too. I have carried out several observing campaigns performed with ground- and space-based facilities, and contributed to the processing and release of new solar data, e.g. in the framework of the H2020 SOLARNET project. In addition, I have actively worked at many public outreach activities organized at local, national, and European level, e.g. by developing and promoting the many projects proposed by the EST-COM office. I'm an active member of the Italian scientific teams working at the EST, IBIS 2.0 projects, and at the SOLAR-C and MUSE missions.

I wish to be an even more active member of the European Solar Physics community and to become part of the ESPD board, in order to offer it both the enthusiasm and perspective of early-career researchers. If elected, I would help strengthen the links among researchers with complementary backgrounds, I would work to promote solar physics to the general public and to other research fields, and I would foster actions aiming to encourage students and young researchers to study our Sun and to join the ESPD.

**Paolo Pagano** (Università degli Studi di Palermo, Italy)

I am an Associate Professor at the University of Palermo where I have landed after working as post-doc at KU Leuven and at the University of St Andrews. My research interests focus on studying the mechanisms behind the dynamic and hot solar corona using MHD simulations. I have especially investigated magnetic reconnection, wave-based coronal heating mechanisms, flux rope ejections, and sources of Space Weather. I have strived to link MHD simulations with observations of the solar corona and to use this tool to interpret the outstanding problems of solar physics in the corona.

"My motivation to join the ESPD Board lies in bringing my point of view and experience to the discussion in order to strengthen the European solar physics community on the international stage. Especially, I aim at expanding the visibility and potential of High Performance Computing as essential tool to interpret increasingly more complex observations and in situ measurements. This is

particularly crucial if we want to develop modelling techniques to understand data from contemporary missions and we want to contribute to the development of future Space Weather forecasting tools."

**Daria Shukhobodskaja** (Royal Observatory of Belgium, Belgium)

I am a solar physics scientist working at the Solar Influences Data Analysis Center (SIDC) at the Royal Observatory of Belgium. I started my career by modelling magnetohydrodynamic wave propagation, followed by the analysis and modelling of Coronal Mass Ejections, as well as the validation of the EUHFORIA model. Alongside my strong background in fundamental solar physics, my experience at SIDC has given me a unique perspective on the importance of integrating scientific research with operational needs, particularly in enhancing space weather forecasting capabilities. I believe that fostering a strong connection between research and operations is essential for advancing our understanding of solar phenomena and their impacts on Earth. I am applying for the position of ESPD Board Member with a strong commitment to advancing the field of solar physics and enhancing the collaboration between research and operational communities. As part of SIDC, which coordinates the Solar Expert Service Centre within ESA's Space Weather Service Network and operates an active space weather forecasting center, I am deeply involved in bridging the gap between fundamental solar physics research and practical, real-time applications. As a Board Member, I will support the ESPD by reinforcing the connections between advances in solar physics and the development of reliable space weather forecasting. Since nurturing the next generation of researchers is crucial for our community's continued growth and innovation, as a Board Member, I will support any opportunities for young scientists to engage with the ESPD, participate in collaborative projects, and contribute to advancing our field. Finally, as a Board Member, I would be dedicated to promoting the importance of solar physics to the general public. In order to mitigate the Sun's influence on our planet we are obliged to raise awareness of the need to improve our fundamental understanding of key solar mechanisms. As a result, we can inspire greater support for solar research and emphasise its crucial role in understanding and mitigating the risks associated with the impacts of space weather.

**Hector Socas-Navarro** (Instituto de Astrofísica de Canarias, Spain)

Hector has 29 years of experience in solar research, including observations, interpretation and development of instrumentation. He has recently been appointed director of the Foundation for the European Solar Telescope. His research has been centered mostly on non-LTE radiative transfer, spectro-polarimetric observations, semiempirical atmospheric modeling with inversion techniques and magnetic field diagnostics in the photosphere and chromosphere. In particular he has made extensive efforts on the interpretation of the Call infrared triplet lines spectro-polarimetry as a tool for detailed diagnosis of the chromosphere. He also participated in the DKST design and served as its ViSP instrument project scientist.

**Meetu Verma** (Leibniz Institute for Astrophysics Potsdam (AIP), Germany)

I am a researcher at the Leibniz Institute for Astrophysics Potsdam (AIP). My research interests include high-resolution imaging, spectroscopy, and spectropolarimetry of solar magnetic features, with a particular focus on multi-instrument and multi-wavelength studies of pores and sunspots at

various stages of evolution and activity. I am also involved in the development of data analysis tools for flow tracking in time series data and spectral classification using machine learning techniques. I have extensive experience in organizing and participating in observing campaigns, especially coordinated campaigns, including those involving space missions and German/U.S. telescopes for high-resolution solar observations. Throughout my career, I have received funding for myself and students from the German Academic Exchange Service (DAAD), the German Research Foundation (DFG), and the European Union. At AIP, I have been an elected member of the Internal Scientific Committee since 2020.

My motivation to become an ESPD board member is to promote solar physics within the European astrophysics community and to strengthen collaboration in this field. With the advancement of high-resolution observations and analysis techniques, we are in an era with access to large volumes of new and archived high-quality data. As a member of the ESPD Board, I would like to contribute to increasing the visibility of solar physics in the broader astrophysics community, both within Europe and internationally. In addition, I am motivated to help strengthen networking efforts between various solar physics groups across Europe.

**Gary Verth** (University of Sheffield, UK)

I am a senior lecturer at the University of Sheffield (UK) and have been a solar physics researcher for 20 years. I co-founded the Plasma Dynamics Group at Sheffield and have been team leader and members of international teams and consortia, e.g., the Waves in the Lower Solar Atmosphere (WaLSA) team.

Certainly, since I obtained a PhD in 2008, it is now much more difficult for promising and talented PhD students and early career researchers to establish a permanent career in solar science research at both UK and European institutes. This is a cause of great concern and is my main motivation for putting my name forward as a candidate to be an ESPD board member. It is essential for us to nurture and support the next generation of European solar scientists, now more than ever, and I will contribute all I can to the ESPD to achieve this.

**Stephanie Yardley** (Northumbria University, UK)

I am an STFC Ernest Rutherford Fellow, Vice-Chancellor's Fellow and Assistant Professor at Northumbria University, who has been conducting research in the field of solar and heliospheric physics since 2013. I have expertise in both solar observations (ground and space-based observatories) and data-driven magnetic field modelling. My research focuses on understanding the physical processes underlying solar activity and space weather. In particular, solar phenomena that can drive hazardous space weather conditions in the near-Earth environment such as the eruption of coronal mass ejections, energetic particles that are accelerated during these eruptions, and the origins of the solar wind. Most recently, I have led multiple observation campaigns for ESA/NASA's Solar Orbiter mission on solar wind connection science, and also an ISSI team on quantifying the space weather impacts caused by extreme energetic particle events. Previously, I was a co-moderator for the solar eruptions cluster of the COSPAR ISWAT initiative, contributing to the updated COSPAR space weather roadmap. Alongside my research, I am actively involved in public engagement, media and outreach activities.

I am a very active member of the community hence, if elected to be part of the ESPD board, I would contribute to the European Solar Physics community in a variety of ways. I want to strengthen



collaborations between and unite scientists from different backgrounds and research areas in Europe and beyond, support and facilitate the career development of early career and next-generation scientists. Finally, promote solar physics and disseminate scientific results effectively through public engagement, media and outreach.