

Meeting on operational and research capabilities for better understanding solar-terrestrial interactions

29 September – 3 October 2025, Belgrade, Serbia

in organization of Scientific Society Isaac Newton Belgrade and Institute of Physics Belgrade

Scientific rationale

Interactions between the Sun and Earth include solar radiation, solar wind, magnetic field variations, and their effects on Earth's magnetosphere, ionosphere, atmosphere, climate, technology, and human health. These interactions are both scientifically significant and practically important, making the "Meeting on operational and research capabilities for better understanding solar-terrestrial interactions" highly relevant. The conference aims to bridge observational, theoretical, and operational efforts to deepen our understanding of solar-terrestrial phenomena, improve predictive models, and enhance preparedness for solar-driven events. Despite progress, current prediction capabilities remain limited, which hinders effective response. Solar activity influences satellites, communication systems, power grids, and climate patterns. Events like solar flares, coronal mass ejections, and geomagnetic storms can disrupt technology, while long-term solar variability impacts climate. The interdisciplinary nature of these studies, combined with the explosion of observational data and advancing computational models, calls for integrated approaches. The conference will foster collaboration, promote real-time monitoring tools, explore topics like cosmic ray modulation and space weather effects, and encourage the use of AI and new theoretical frameworks. Ultimately, the event aims to drive innovation and international cooperation, strengthening both scientific understanding and practical readiness. Participants will have the opportunity to share their work, attend keynote speeches, and engage in discussions about solar physics, space weather, and related topics.

For more information and supplementary material, please visit: <https://cosmic.ipb.ac.rs/workshop-2025/index.html>

UNDER THE SUPPORT OF: Ministry of Science, Technological Development and Innovation of the Republic of Serbia

VENUE: Institute of Physics Belgrade, Pregrevica 118, Belgrade (Zemun), Serbia



Registration fee:

- Standard registration fee: 100 €
- Student registration fee: 50 €

For registration and other inquiries, please contact:

konferencijabeograd2024@gmail.com

Scientific Organizing Committee:

- Vladimir Srećković (Co-chair) (Institute of Physics Belgrade, Belgrade, Serbia), President of the Scientific Society Isaac Newton Belgrade,
- Nikola Veselinović (Co-chair) (Institute of Physics Belgrade, Belgrade, Serbia),
- Mihailo Savić (Institute of Physics Belgrade, Belgrade, Serbia)
- Dejan Joković (Institute of Physics Belgrade, Belgrade, Serbia)
- Aleksandar Dragić (Institute of Physics Belgrade, Belgrade, Serbia)
- Aleksandra Kolarski (Institute of Physics Belgrade, Belgrade, Serbia), Secretary of the Scientific Society Isaac Newton Belgrade,
- Dušan Marčeta (Faculty of Mathematics, Belgrade, Serbia)
- Dragana Ilić (Faculty of Mathematics, Belgrade, Serbia)
- Luka Popović (Astronomical Observatory, Belgrade, Serbia), director of the Astronomical Observatory
- Srđan Samurović (Astronomical Observatory, Belgrade, Serbia)
- Viacheslav Sadykov (Georgia State University, Atlanta, USA)
- Darije Maričić (Zvezdarnica Zagreb, Zagreb, Croatia), director of the Zvezdarnica Zagreb
- Gordana Jovanović (University of Montenegro, Podgorica, Montenegro)
- Hans Eichelberger (Space Research Institute, Austrian Academy of Sciences, Graz, Austria)
- David Knežević (MLZ, Technische Universität München, Garching, Germany)
- Babatunde Rabui (African University of Science & Technology, Abuja, Nigeria)
- Nikola Petrov (Institute of Astronomy and NAO, Bulgarian Academy of Science, Sophia, Bulgaria)

Local Organizing Committee

- Vladimir Srećković (Co-chair) (Institute of Physics Belgrade, Belgrade, Serbia), President of the Scientific Society Isaac Newton Belgrade,
- Nikola Veselinović (Co-chair) (Institute of Physics Belgrade, Belgrade, Serbia),
- Mihailo Savić (Institute of Physics Belgrade, Belgrade, Serbia)
- Dejan Joković (Institute of Physics Belgrade, Belgrade, Serbia)
- Aleksandar Dragić (Institute of Physics Belgrade, Belgrade, Serbia)
- Aleksandra Kolarski (Institute of Physics Belgrade, Belgrade, Serbia), Secretary of the Scientific Society Isaac Newton Belgrade,
- Zoran Mijić (Institute of Physics Belgrade, Belgrade, Serbia)
- Filip Arnaut (Institute of Physics Belgrade, Belgrade, Serbia)
- Milica Langović (Institute of Physics Belgrade, Belgrade, Serbia)
- Sreten Jevremović (Institute of Physics Belgrade, Belgrade, Serbia)

- ❖ The registration fee covers: conference material, ice breaker cocktail, conference dinner, coffee breaks.
- ❖ The registration fee does not cover: meals, accommodation.

Registration forms and templates for abstracts and contributing papers can be downloaded at:
<https://cosmic.ipb.ac.rs/workshop-2025/index.html>

Please send registration forms and abstracts / contributing papers to:
konferencijabeograd2024@gmail.com

Contact: konferencijabeograd2024@gmail.com