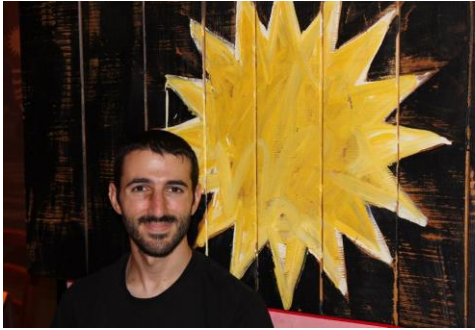


SCOSTEP 2022 DISTINGUISHED YOUNG SCIENTIST AWARD



SCOSTEP is pleased to announce that the **2022 Distinguished Young Scientist Award** is given to

Dr. Theodosios Chatzistergos
Max Planck Institute for Solar System Research

Citation: For his tremendous and unprecedented work on exploiting the potential of historical solar observations for cardinal improvement reconstructions of past solar variability, a crucial input to climate models.

Dr. Theodosios (Theo) Chatzistergos obtained his BSc in Physics (Astrophysics) from the National and Kapodistrian University of Athens, Greece (2011), MSc in Astrophysics, with distinction, from the Queen Mary University, London, UK (2013), and PhD (2017) from Georg-August University of Göttingen, Germany. Between 2018 and 2020 he was a postdoc at the Istituto Nazionale di Astrofisica (INAF) - Osservatorio Astronomico di Roma, Italy, and is currently a postdoc in the “Solar Variability and Climate” group at the Max Planck Institute for Solar System Research, Göttingen, Germany, working for the project “Modelling and Understanding Solar Irradiance Changes” in frame of the German national programme “Role of the Middle Atmosphere in Climate” (ROMIC), closely related to SCOSTEP.

Since 2013, when Theo started working on his PhD project, his work has focused on uncovering and understanding solar magnetic activity over the past centuries, a topic of immense importance for Earth’s climate science and Heliospheric physics. The key input to studies of long-term solar activity and variability are historical solar observations. Unlike the immense richness of data available to those studying the present-day Sun and the heliosphere, understanding the physics and the behavior of the Sun on longer time scales has to rely on data of significantly poorer coverage and quality. Therefore, historical archives, such as sunspot observations or photographs of the Sun, are of irreplaceable value for understanding the long-term changes in the behavior of the Sun. The information stored in such archives, however, must first be “unlocked”. That is, the historical data must often be cleaned of artefacts and calibrated before they can be used in a meaningful way. This is where Theo made giant strides. He has literally produced the key to unlocking the unique potential of precious historical solar data. It needs to be stressed that the correction and analysis of the historical data are extremely tricky and challenging. But Theo managed to make almost all the images usable, including many that originally seemed impossible to correct. This work has brought great benefits to the solar-terrestrial research community.

Theo’s competence, as well as the magnificent quality and thoroughness of his research have already brought high recognition by the international scientific community. He has given invited talks and lectures at international conferences and schools; and has published over 12 papers in peer reviewed journals. He was invited to join the international ISSI team on recalibration of sunspot number series and to lead one of the science topic teams on the Indian Aditya-L1/SUIT mission, which is expected to finally shed light on another key question of solar irradiance studies: the magnitude of the irradiance variability in the UV range 200–400 nm. He is regularly asked to serve as a reviewer for high-impact scientific journals. Finally, Theo is also very actively involved in public outreach activities focusing on the solar influence on Earth’s climate, by participating in the relevant dedicated events and using internet platforms.

For all of these accomplishments, Dr. Theodosios Chatzistergos is most deserving of the SCOSTEP Distinguished Young Scientist Award.