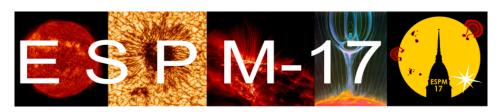
17th European Solar Physics Meeting ESPM-17



Contribution ID: 199 Type: Invited

The never-ending attraction of the Sun's magnetic personality

Thursday 12 September 2024 16:50 (30 minutes)

Its magnetic field turns the Sun from a dull, middle-aged star into a lively, variable, energetic and attractive subject of study. The field relieves our star from the monotony of a placid, somewhat boring existence, providing it instead with a restless and engaging magnetic personality. This is seen in the play of its ever-changing magnetic features such as mighty sunspots and faculae at the solar surface, majestic prominences, plage and spicules in the chromosphere, and towering loops, plumes and holes in the corona. These give the Sun its sparkle, from time to time culminating in the fireworks set off by flares and coronal mass ejections. This talk will provide a very personal selection of aspects of the structure and evolution of the solar magnetic field, how it shapes the Sun's atmosphere and makes the Sun variable and active and how this variability and activity compares with those of other stars.

Primary author: SOLANKI, Sami K. (Max-Planck-Institut für Sonnensystemforschung (MPS), Göttingen, Germany) and School of Space Research, Kyung Hee University, Yongin, Republic of Korea)

Presenter: SOLANKI, Sami K. (Max-Planck-Institut für Sonnensystemforschung (MPS), Göttingen, Germany) and School of Space Research, Kyung Hee University, Yongin, Republic of Korea)

Session Classification: Senior Prize Lecture

Track Classification: Solar interior, sub-surface flows and long-term variability