



INTERNATIONAL SCHOOL OF SPACE SCIENCE

L'Aquila - ITALY

1st Solar Orbiter Summer School

“Towards a Deeper Understanding of the Sun and the Heliosphere with Solar Orbiter”

L'Aquila, September 22-25, 2014

Programme and Lecturers

OBSERVING THE SUN AND THE HELIOSPHERE WITH SPACE MISSIONS

L. Colangeli (TBC) (ESA, Head of the Coordination Office for the Scientific Programme)
Solar Orbiter within the ESA science programme

L. Guhathakurta (NASA, Lead Program Scientist for LWS)
Solar Orbiter within the NASA heliophysics programme

B. Negri (ASI, Head of the Unit for Exploration and Observation of the Universe)
Solar Orbiter within the ASI programme

D. Müller (ESA, Solar Orbiter Project Scientist)
Solar Orbiter Science Overview: Linking the Sun and Inner Heliosphere

SCIENCE FROM IN-SITU INSTRUMENTS

J. Rodríguez-Pacheco / R. Wimmer-Schweingruber
(Universidad de Alcalá, Madrid, Spain / University of Kiel, Germany)
EPD: Solar Energetic Particles

T. Horbury (Imperial College, London, UK)
MAG: The Heliospheric Magnetic Field

M. Maksimovic (Observatoire de Paris-Meudon, France)
RPW: Measuring Solar Radio and Plasma Waves

C. Owen / S. Livi / P. Louarn
(UCL-MSSL, UK / SwRI, San Antonio (TX), USA / IRAP-CNRS, Toulouse, France)
SWA: Solar Wind Analyser

R. Bruno (Istituto Astrofisica e Planetologia Spaziali/INAF, Roma, Italy)
Solar Wind: The Legacy of Helios

SCIENCE FROM REMOTE-SENSING INSTRUMENTS

D. Berghmans (Royal Observatory of Belgium, Brussels, Belgium)
The Sun's Corona I: On-Disk Imaging with EUI

E. Antonucci (Osservatorio Astronomico di Torino/INAF, Italy)
The Sun's Corona II: Off-Disk Imaging with METIS

J. C. del Toro Iniesta (Instituto de Astrofísica de Andalucía, Spain)
PHI: Polarimetry and Helioseismology with Solar Orbiter

R. Howard (Naval Research Laboratory, Washington (DC), USA)
SoloHI and the near-Sun Heliosphere

A. Fludra / D. Hassler (RAL, Oxford, UK / SwRI, Boulder(CO), USA)
SPICE: Spectral Imaging of the Solar Corona

S. Krucker (University of Applied Sciences Northwestern Switzerland & UC Berkeley, USA)
STIX: Solar Flares and Particle Acceleration

GENERAL LECTURES

S. Solanki (Max Planck Institute for Solar System Research, Lindau, Germany)
The Sun: General Lecture

P. Hellinger (Astronomical Institute, AS CR, Prague, Czech Republic)
Space Plasmas: General Lecture

M. Velli (NASA/JPL, Pasadena (CA), USA)
Solar Probe Plus and Solar Orbiter: The Near Future of Solar Physics

BOARD OF DIRECTORS:

Ester Antonucci antonucci@oato.inaf.it
Roberto Bruno roberto.bruno@iaps.inaf.it
Daniel Müller dmueller@rssd.esa.int

THE DIRECTOR OF THE SCHOOL:

Umberto Villante umberto.villante@aquila.infn.it

Solar Orbiter is the first M-class mission that will be launched as part of the ESA Cosmic Vision 2015-2025 and will be dedicated to solar and heliospheric physics. This mission offers a unique opportunity to discover the fundamental links between the magnetized solar atmosphere and the dynamics of the solar wind which, ultimately, is the source of space weather. The purpose of this school is to give to a young audience of graduate students, which ideally represents the next generation of scholars in the physics of the sun and the heliosphere, a complete view of the overall science of the mission to the extent needed, for these future Solar Orbiter scientists, to understand and fully exploit these unique and unprecedented observations.

GENERAL INFORMATION

The fee of 700 Euro includes board and lodging at the Canadian Hotel in L'Aquila. Applications, including a brief curriculum vitae, are due before **JUNE 15** through the website: WWW.CIFS-ISSS.ORG/APPLICATION.ASP

Some financial support will be available for a limited number of students. Applications will be evaluated by the Scientific Committee of the International School of Space Science, who will decide also on the financial support. Successful applicants will be notified by e-mail.



INTERNATIONAL SCHOOL OF SPACE SCIENCE c/o Dipartimento di Scienze Fisiche e Chimiche
Via Vetoio, 67100 L'AQUILA (ITALY) | E-mail: SSC@AQUILA.INFN.IT | Web: WWW.CIFS-ISSS.ORG

The International School of Space Science is supported by:

Consorzio "Area di Ricerca in Astrogeofisica", Fondazione CARISPAQ, Regione Abruzzo, Comune dell'Aquila, INAF, ASI, ESA