The Physics of Chromospheric Plasmas

Coimbra Solar Physics Meeting – CSPM-2006

October 9 - 13, 2006, Coimbra, Portugal

This is the **Second Announcement** of the Coimbra Solar Physics Meeting "The Physics of the Chromospheric Plasmas" (CSPM-2006) to be held at the University of Coimbra. We invite a wide scientific community to join us for discussing the state-of-art of the solar chromospheric research and related topics. CSPM-2006 will be also the final meeting of the **European Solar Magnetometry Network (ESMN).**

Objectives

In 2006, the Astronomical Observatory of the University of Coimbra (Coimbra, Portugal) – Observatório Astronómico da Universidade de Coimbra (OAUC) - will celebrate the 80th anniversary of performing the first spectroheliographic observations in Coimbra. Full-disk spectroheliograms have been routinely taken in the Ca II K-line (K1 and K3) and in 1990 regular observations in the Hα line have also started.

This anniversary is an excellent opportunity to organize an international solar physics meeting, jointly with a historical session commemorating the life and work of Prof. Francisco Costa Lobo (1864-1945) who installed the spectroheliograph in Coimbra in the 1920s. The instrument itself is a twin of the spectroheliograph operated at the Observatoire de Meudon. The Coimbra University itself (founded in 1290) is one of the oldest European universities. The meeting will take place on its campus just inside the Coimbra historical down-town and will also include an excursion to the Coimbra Observatory which is located at the city periphery.

The scientific meeting will cover various aspects of chromospheric plasmas which are particularly well observed in the above-mentioned Hα and Ca II lines, but also in a variety of other lines including the UV and EUV spectral range. This will include the structure and dynamics of the chromosphere (cell interior, network, spicules etc.) as well as other features seen at the chromospheric level or having the properties of plasmas at chromospheric temperatures: sunspots chromosphere, plages, chromospheric flares, filaments etc. The relation of such plasmas to other atmospheric layers and/or processes will also be discussed, in particular using the UV and EUV data from SOHO (ESA/NASA) and other space telescopes.

A long-term (cyclic) evolution of the chromosphere and its activity, including solar irradiation variations and effects on space weather, will be included, in particular with respect to long-term observations made in Coimbra. Finally, since this meeting is organized around the above-mentioned anniversary, a session devoted to new solar instruments capable of observing chromospheric plasmas will be held (including the space instrumentation).

The conference programme will contain the following sessions:

Historical Session

Session 1: Structure and dynamics of the solar chromosphere

Session 2: Active regions and sunspots

Session 3: Prominences and filaments

Session 4: Chromospheric flares

Session 5: Long-term variations

Session 6: New solar instrumentation

Venue & Location

The meeting will be organized in Coimbra, an old university town situated in the central region of Portugal, between Lisbon (200 km) and Porto (100 km) and about 35 km from the Atlantic coast at Figueira da Foz. It is easily reached from Lisbon and Porto, which both have international airports, by train (2h from Lisbon, 1h15m from Porto) or by bus. The A1 motorway from Lisbon to Porto passes close to Coimbra; there are also good road connections with Spain through Salamanca.

The meeting will take place at the University of Coimbra, in the auditorium *"Auditorio da Reitoria"*.

Programme of the meeting

Sunday, 8 October

Arrival, ***18.00-20.00:*** Registration and welcome drink
Meeting of the SOC/LOC

Monday, 9 October

Morning (9.00-12.30)

Welcome addresses

Historical session:
Fransisco Costa Lobo and the Coimbra spectroheliograph - A. Soares Alves (OUAC)
80 Years of Solar Astrophysics in Coimbra - Z. Mouradian (France)

Coffee break 10.20 – 10.50

Session 1: Structure and dynamics of the solar chromosphere
Key-note 1: Observational aspects of the chromosphere - R.J. Rutten (Netherlands)
Contributions

Afternoon (14.30-18.00)

Session 1: Structure and dynamics of the solar chromosphere
Key-note 2: High resolution observations and modelling of chromospheric spicules - Bart de Pontieu (USA)
Contributions

Coffee break 16.10 - 16.40

Contributions

Evening
Welcome reception at the old Coimbra university

Tuesday, 10 October

Morning (9.00-12.30)

Session 1: Structure and dynamics of the solar chromosphere
Key-note 3: Chromospheric modelling - M. Carlsson (Norway)
Contributions

Coffee break 10.40 – 11.10

Poster viewing

Afternoon (14.30-18.00)

Session 2: Active regions and sunspots
Key-note 1: Semiempirical models of solar and stellar active chromospheres - P. Mauas (Argentina)
Contributions

Coffee break 16.10 - 16.40

Key-note 2: Chromospheric cloud-model inversion techniques - K. Tziotziou (Greece)
Contributions

Excursion: "Biblioteca Joanina", the old library of the University of Coimbra.

Wednesday, 11 October

Morning (9.00-12.30)

Session 3: Prominences and filaments

Key-note 1: The fine structure of solar prominences - P. Heinzel (Czech Republic)
Contributions

Coffee break 10.40 – 11.10

Key-note 2: Unveiling the magnetic topology of prominences - A. Lopez Ariste (France)
Contributions

Afternoon (14.00-19.00)

Excursions: Spectroheliograph –Coimbra Astronomical Observatory
Conimbriga – ruins of the ancient roman town

Thursday, 12 October

Morning (9.00-12.30)

Session 4: Chromospheric flares
Key-note 1: The chromosphere and flare energy - H. Hudson (USA)
Contributions

Coffee break 10.40 – 11.10

Poster viewing

Afternoon (14.30-18.00)

Session 4: Chromospheric flares
Key-note 2: Observations and modelling of line asymmetries in chromospheric flares - A. Berlicki (Poland)
Contributions

Coffee break 16.10 - 16.40

Contributions

Evening
Conference dinner in the "Palacio S. Marcos", an old Portuguese edifice located 20 km from Coimbra.

Friday, 13 October

Morning (9.00-12.30)
Session 5: Long-term variations
Key-note 1: Global variations of the chromospheric irradiance - S. Solanki (Germany)
Contributions

Coffee break 10.40 – 11.10

Key-note 2: Magnetic heating of the chromosphere and its relationship with long term trends – J. Fontenla (USA)
Contributions

Afternoon (14.30-18.00)

Session 6: New solar instrumentation

Key-notes: Solar Orbiter - a mission update - B. Fleck & R. Marsden (USA)
The SOT and AiA instrument - A. Title (USA)
ATST - S. Keil (USA) or other speaker – TBC
Chromospheric science with the STEREO mission - A. Vourlidas (USA)
Options for the Dutch Open Telescope - R. J. Rutten and R.H. Hammerschlag (Netherlands)
Themis-NG - B. Gelly (France)

Coffee break 16.10 - 16.40

Conclusions of the meeting

Meeting of the SOC/LOC

Scientific Organizing Committee

M. Carlsson (Institute of Theoretical Astrophysics, Oslo, Norway)
W. Curdt (Max Planck Institute for Solar System Research , Katlenburg-Lindau, Germany)
C. Denker (Big Bear Solar Observatory, Big Bear City, CA, USA)
I. Dorotovič (OAUC, Coimbra, Portugal; Slovak Central Observatory, Hurbanovo, Slovakia)
L. Fletcher (University of Glasgow, Glasgow, Scotland, United Kingdom)
P. Heinzel (Astronomical Institute, Ondrejov, Czech Republic) - **Chair**
R. Rutten (Utrecht University, Utrecht, Netherlands)
B. Schmieder (Observatoire de Meudon, Meudon, France)
J. Trujillo-Bueno (Instituto de Astrofisica de Canarias, La Laguna, Tenerife, Spain)
G. Tsiropoula (National Observatory of Athens, Athens, Greece)
H. Uitenbroek (NSO Sacramento Peak Observatory, New Mexico, USA)
J. C. Vial (Institut d'Astrophysique Spatiale, Orsay, France)

Local Organizing Committee (OAUC Coimbra)

S. Batista (GAUC, ESRI Portugal, S. A.),
I. Dorotovič (OAUC, GAUC, UNINOVA),
J. Fernandes (OAUC, GAUC) – **Chair**,
A. Garcia (OAUC, GAUC).

To contact the LOC: cspm2006@mat.uc.pt

Deadlines

- **31 August** - Closing date for registration and late abstracts (can be accepted only as posters)
- **31 August** - Closing date for hotel reservation
  - Final Announcement
- **8 October** - Arrival, registration

• **9 October** - Meeting starts

• **13 October** - Meeting ends

Financial Support

This was distributed on base of previous applications and according to recommendations of the SOC. Very limited support can be still available depending upon the conference budget.

Proceedings

The proceedings of the Coimbra Solar Physics Meeting 2006 „The Physics of Chromospheric Plasmas“ will be published in the ASP (Astronomical Society of the Pacific) Conference Series [http://www.astrosociety.org/pubs/cs/confseries.html]. The editors are P. Heinzel, I. Dorotovic and R.J. Rutten. The deadline for manuscript submission will be **30 November 2006**. The style of manuscripts (LATEX style files) will be defined in the Final Announcement.

Accommodation Facilities

The LOC have an agreement with the local travel agency VIAGENS ABREU to provide hotel reservation and social events arrangements. Special hotel rates have been negotiated for the participants of the meeting in several hotels. To reserve a room, please download the Hotel Booking Form from the webpage of the meeting, complete it, and return no later than 30 August 2006.
The LOC will reserve several rooms in the University Residence (Residência Universitária) at a price of 7.50 Euros per person in a double room, per night.

Visa Applications

Those who need visa (participants and/or accompanying persons) to enter Portugal have to contact a Portuguese Embassy well in advance. If you need a letter of invitation, please contact Joao Fernandes at: cspm2006@mat.uc.pt or jmfernan@mat.uc.pt.

Important websites:

CSPM-2006: http://www.mat.uc.pt/~cspm2006/
Coimbra University: http://www.uc.pt/english/
Coimbra Observatory: http://www.mat.uc.pt/~obsv/obsv/