#### **ACTIVITIES 2013-2015: SERVICE**

Aimed at offering access to the most advanced, largest first-class infrastructures –telescopes, instruments– and to the most demanded European Science Data Centre for high-resolution ground-based solar physics:









VTT – Tenerife



BIS & ROSA at DST - US

DB repositories: SDC Fur



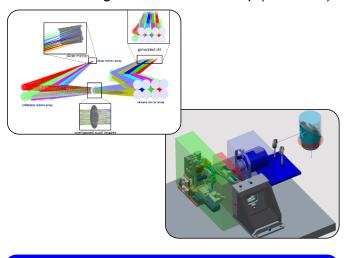
• 318 observing days provided by SST, VTT, THEMIS and GREGOR telescopes, and by IBIS/DST and ROSA/DST instruments (70.5% of the total expected access time to be offered in four years).

- 43 astronomers have benefited from travel and subsistence grants to carry out in situ observations. 20 of them were new users of the infrastructures.
- 47 groups (projects) have accessed the telescopes and instruments offered under the Access Programme
- A total of 218 astronomers (team members) from 18 countries (14 European, 4 non-European) integrated these 47 groups
- A service observing mode is offered as an innovative organizational model for the operation of existing and future ground-based infrastructures.

### ACTIVITIES 2013-2015: JOINT RESEARCH

Aimed at developing tools and prototypes for data innovative instruments and data processing and access, the joint research activities are organised in four work packages:

- Tools for Innovative Data Handling:Pipelines, Databases & SVO.
- Advanced Instrumentation Development.
- Wavefront Control: Turbulence Characterization and Correction.
- Synoptic Observations: Solar Physics Research Integrated Network Group (SPRING).



# **MORE INFO**

### **SOLARNET Project Office**

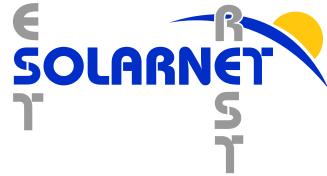
Instituto de Astrofísica de Canarias C/ Vía Láctea s/n, La Laguna Tenerife E-38205, SPAIN

www.solarnet-east.eu

Phone: 922 605 192 Fax: 922 605 210

E-mail: solarnet@iac.es





# WHAT IS SOLARNET?

SOLARNET, the high-resolution Solar Physics Network, is an EU-funded project aimed at a better and wider usage and profit of present European facilities in the field of high-resolution solar physics with the goal of getting prepared for the operation of the next-generation European Solar Telescope.

SOLARNET brings together and integrates the major European research infrastructures in the field of high-resolution solar physics, in order to promote their coordinated use and development.

This network involves all pertinent European research institutions, infrastructures, and data repositories. Together, these represent first-class facilities. The additional participation by private companies and by non-European research institutions maximizes the impact on the worldwide scale.

SOLARNET develops its activities in the period 2013-2017, with a budget of 8.2 M€ (of which, 6.0 M€ represent the EU contribution).

# **PARTNERS**

32 participating institutions:

24 EU research institutions6 EU private companies2 USA research institutions.

More than 500 solar physics researchers from 16 countries (15 EU + USA) are participating in SOLARNET.

Coordinator: IAC



### **GOALS**

- Facilitate access to the key European groundbased high-resolution facilities to external European users through an ambitious Transnational Access Programme (TAS).
- Transfer knowledge of data acquisition and data processing to a wide European research community.
- Increase the impact of ground-based highresolution data, through adequate processing pipelines, accessible databases and powerful Virtual Observatory tools.
- Encourage the combined use of space and ground-based data by providing unified access to data repositories through the Virtual Observatory.
- Foster synergies between different research fields to share scientific interests and challenges.
- Form the new generation of solar researchers with the organization of training schools and a Mobility Programme at European scale.
- Develop prototypes of novel generation instruments.
- Study the effects of local and non-local turbulence and the means for its correction to minimize its impact on image quality.
- Contribute to the improvement of the designs of future large European ground and space-based solar telescopes.
- Reinforce partnership with industry to promote technology transfer through existing networks.
- Disseminate the activities of the project towards society.

This project is supported by the European Commission's FP7 Capacities Programme for the period April 2013 – March 2017 under the Grant Agreement nr. 312495.





## **STRUCTURE**

The project is structured in Networking Activities, Transnational Access and Service Activities and Joint Research Activities, organised in 10 work packages.

## **ACTIVITIES 2013-2015: NETWORKING**

Aimed at fostering a culture of co-operation for research on solar physics and other astrophysical topics. SOLARNET organised in 2013-2015:

Three thematic Schools and Workshops



Three Meetings on Solar Physics and Related
Topics



- 12 young researchers carried out short stays in 9 European and non-European universities or research institutions
- Four other SOLARNET related meetings and workshops