

Press release Solar Orbiter Workshop 5 – September 7, 2012

From 10 till 14 September 2012, the 5th Solar Orbiter workshop will take place in Bruges, Belgium. Solar Orbiter is a spacecraft that will travel closer to the Sun than any satellite to date. It is a partnership between ESA and NASA, with launch planned for 2017 and a nominal lifetime of 7 years.

Several countries, including Belgium, are discussing the science of this mission. The 5th in the series of international Solar Orbiter meetings is being organized by the Royal Observatory of Belgium and the Solar-Terrestrial Centre of Excellence, STCE.

Solar Orbiter is designed to make major breakthroughs in our understanding of how the Sun generates and propels the flow of particles in which the planets are bathed, known as the solar wind.

The Sun itself affects this solar wind, making it very turbulent, thus triggering spectacular auroral displays on Earth and other planets, and disrupting satellite-based communication. This is what space weather is about.

To get a close-up view of the Sun and to observe the solar wind, Solar Orbiter will fly to within 45 million kilometers of the Sun, closer than Mercury and almost 4 times as close to the Sun than the Earth. It will also image the solar poles for the first time, helping us understand how the Sun generates its magnetic field.

Belgium has the leading role in the onboard telescopes that will image the Sun in the extreme ultraviolet.

Pierre Rochus from Centre Spatial de Liège is responsible for the construction of the instrument: 'We gained already a lot of expertise from the PROBA2 mission, an ESA micro-satellite. This proves to be very useful for the extreme ultraviolet imagers (EUI) onboard Solar Orbiter'.

David Berghmans and Cis Verbeeck are both working at the ROB, which will do the operations management after the Solar Orbiter launch. They are looking forward to the moment when the satellite will be flying in space: 'Solar Orbiter is the most exciting solar physics mission of our career, promising to bring far-reaching advances in the understanding of our local star, the Sun. We can't be happier with the important investments Belgium is making in space research.'

During the upcoming workshop, more than 160 scientists from 17 countries all over the world will address the science questions of this exciting and challenging mission.

Solar Orbiter homepage: <http://sci.esa.int/solarorbiter>

Solar Orbiter Workshop 5 page: <http://www.stce.be/solarorbiter5/>

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