

## **Observations of the Perseids 2010 Using SPOSH Cameras**

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## Abstract

We will carry out a meteor observing campaign for the Perseids 2010 using the SPOSH (Smart Panoramic Optical Sensor Head) cameras (see. Fig.1). The SPOSH camera has been developed at DLR and Jena Optronics under contract to ESA/ESTEC. The camera is designed to imaging faint transient noctilucent phenomena on dark planetary hemispheres and meteor observations of high radiometric and geometric quality have been demonstrated. The camera features a custom-made optical system with a field of view (FOV) of  $120^{\circ}$  x  $120^{\circ}$  (168° across the image diagonal) and is equipped with a highly sensitive back-illuminated 1024 x 1024 CCD chip.

Two SPOSH cameras will be deployed at remote observing posts in Greece. The choice of the locations will assure a dark sky and favorable weather conditions, which prevail in southern Europe during the summer. From double-station observations (see Fig. 2), the trajectories and the orbits of the meteoroids will be calculated, and the photometric properties of the meteors will also be determined. Assuming a successful campaign, the observation results will be presented at the conference. The campaign will be organized by the DLR and the Technical University of Berlin, involving students and amateur astronomers from Greece.



Fig 1: The Smart Panoramic Optical Sensor Head



Fig. 2: A double-station meteor captured during the 2009 meteor observing campaign using SPOSH cameras