

## Séminaire organisé par

AIM &Le service d'Astrophysique CEA/DSM/Irfu



## A NEW WINDOW ON THE SUN: THE INDIAN NATIONAL LARGE SOLAR TELESCOPE

S. S. Hasan (Indian Institute of Astrophysics, India)

A major experimental facility called the National Large Solar Telescope (NLST) has been proposed for studying the Sun. The project envisages the development of a state-of-the-art 2-m class telescope to carry out high spatial and spectral resolution studies of the solar atmosphere.

The telescope utilizes an innovative design with low number of reflections to achieve a high throughput and low polarization. High order adaptive optics is integrated into the design that works with a modest Frieds parameter of 7-cm to give diffraction limited performance. The telescope will be equipped with a suite of post-focus instruments including broad and narrow band imagers, a high-resolution spectrograph and a polarimeter. A comprehensive site characterization programme has demonstrated the existence of a suitable dry site with large number of sunshine hours.

The main science goals of NLST include: a) Magnetic field generation and the solar cycle; b) Dynamics of the magnetized photosphere & chromosphere; c) Helioseismology; d) Prominences; e) Activity; and f) Night time astronomy.

This project is led by the Indian Institute of Astrophysics and has national and international partners. Its geographical location will fill the longitudinal gap between Japan and Europe and will be the second largest international facility of its kind after the 4-m DKIST in Hawai.

8 septembre 2015

10h00 Salle Galilée bât 713 - Orme des Merisiers





Le petit-déjeuner précèdera le séminaire

Pascale Chavegrand - secrétariat Irfu/SAp 01.69.08.78.27 chavegrand@cea.fr