

KIDS TALK

Abstract:

An artificial star is created in the mesosphere at 90 km altitude, where a naturally occurring layer of sodium atoms interacts with a resonant laser beam, and spontaneously radiates in all directions. This artificial beacon is called Laser Guide Star (LGS) and is used in conjunction with adaptive optics systems in large astronomical telescopes for atmospheric turbulence correction. We will introduce the principles of laser guide star generation, particularly the case of a continuous wave laser beam. We will show the current projects on simulations and optimisation of laser guide stars in a laboratory environment using sodium gas cells and the application of laser guide stars for remote sensing of geomagnetic field in the mesosphere.

"Principles of Laser Guide Stars

for Astronomy and Magnetometry"

Speaker:

Felipe Pedreros, JGU Mainz

When: Friday, January 15th 2016, 10:00 am

Where: Room 46-387/388

Undergraduate and graduate students as well as postdocs are welcome and encouraged to join our discussion.

***** COFFEE AND COOKIES WILL BE SERVED *****

