

## **CERN** Colloquium

<sup>SPEAKER:</sup> Prof. Ernst Messerschmid (Universität Stuttgart, IRS Astronautik und Raumstationen)

## TITLE: From Space to Earth – Spaceflight for new Knowledge and Innovations

- DATE: Thu 30/05/2013 16:30
- PLACE: Main Auditorium

## ABSTRACT

In his presentation, titled "From Space to Earth – Spaceflight for new Knowledge and Innovations", Prof. Ernst Messerschmid will begin with his own spaceflight experience on the U.S. Space Shuttle Challenger in 1985 for the German Spacelab D1 Mission.

With a few examples he will illustrate the relevance of using the microgravity environment for a wide range of multidisciplinary experiments. This is followed by a description of the International Space Station, the European contribution to the ISS, and how astronauts live and work over several months in space.

In the next two decades, humanity will strive to fly back to the Moon, to asteroids and later on to Mars. New systems for transportation and infrastructure will form a complex mission scenario, operated by robotic systems and later by astronauts.

Today a wide range of scientific or technological objectives are carried out in space, mostly through international cooperation. Commercial missions are funded by the private sector. Space is now a scientific laboratory, a marketplace, and a workplace with services – from space to Earth – and for new knowledge and innovations.

Organised by: Ignatios Antoniadis/PH-TH ......\*\*Tea and coffee will be served at 16h00\*\*