Contribution ID: **136** Type: **Talk**

Detectors and imagers for planetary exploration missions

Monday 4 September 2017 09:00 (30 minutes)

In the last 50 years many spacecrafts have explored all major planets and many other small planetary objects within our solar system. Most of the missions are based on remote-sensing instruments to globally explore the physical-, chemical and geological nature of the planetary objects. Many recent and future missions will explore our solar system by landers and rovers with in-situ instrumentation or by sampling mission in order to bring sampling probes back to our Earth for more detailed analysis at our home-laboratories.
In nearly all of the missions electro-optical instruments and particularly imaging instruments play a major role.

The key components of all electro-optical and imaging instruments are the optical subsystem (e.g. the lens or telescope), the detectors and the associated detector electronics.

This talk shall give an overview about past and recent developments of VIS/NIR detectors and imagers for planetary exploration missions with some emphasis to European instrumental contributions. It will also give an outlook about some future missions and their imaging sensors.

Author: MICHAELIS, Harald (DLR)

Presenter: MICHAELIS, Harald (DLR)

Session Classification: Detectors for ground and space-based astronomy, planetary and space science (I)