

Joint seminar of the NPI of the CAS

20. 11. 2025

Mgr. Robert Filgas, Ph.D., IEAP CTU Prague: *Radiation monitors for space application*

Abstract:

This talk will present motivation for the need to detect and monitor radiation environment in space, methodology of detection as well as brief history of radiation detectors used in space. The lecture will concentrate on the space radiation observation using semiconductor detectors of the Timepix family, overview of such detectors developed at IEAP CTU and their application in space. These missions include deployment on ISS, Lunar Gateway and most recently for in-situ resources exploration of planetary bodies like Moon and Mars, where IEAP CTU is developing neutron spectrometers to be used for mapping of subsurface water deposits.