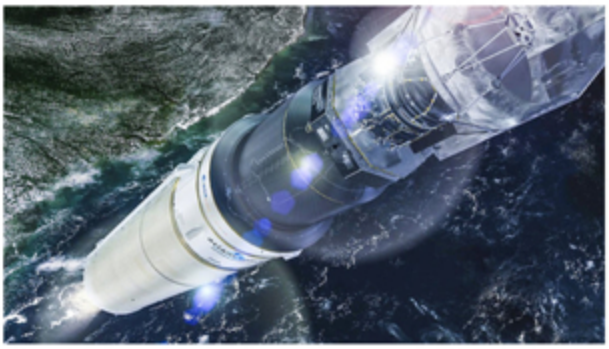
Guest Lectures

When: Friday 24th October 2014
Where: Technická 2, Praha 6, room no. 80

Dr. Bertram Arbesser-Rastburg

Space Activities in Europe using Microwaves
9:30 – 10:30 am

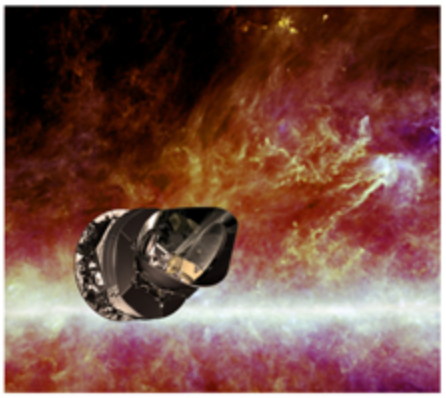


The lecture will first introduce ESA and its various programmes and then give examples for challenging space missions with emphasis on the underlying wave interaction and propagation issues.

Dr. Antoine Roederer

Satellite Antennas: Some Key European Developments and Trends
10:45 – 12:00 am

The lecture first covers a review of antenna requirements and types for different space missions. It then presents some key European space antenna designs and technology developments including reflector and array antennas. Some promising concepts and trends for the future are discussed in conclusion.



Dr. Bertram Arbesser-Rastburg started at the Technical University of Graz where he was involved in the design of a C-band weather radar for propagation studies, 1983 he became Propagation Engineer at INTELSAT in Washington, D.C., taking responsibility for propagation experiments in tropical regions. In 1988 he joined the European Space Agency where he was responsible for the planning and implementation of wave propagation studies for all aspects of satellite communication and navigation as well as wave interaction studies for earth observation. End of 2007 he was appointed Head of the Electromagnetics and Space Environment Division of the European Space Agency (until 2014), responsible for R&D and project support in the fields of Antennas, Propagation, EMC and Space Environment. He is Chairman of ITU-R SG3 (Propagation), Coordinator of the European part of the international SBAS-IONO Group and Executive Secretary of the Galileo Science Advisory Committee.

Dr. Antoine Roederer designed broadcast antennas at JAMPRO in Sacramento (1967). He then served in the French Army Research (1968), taught electromagnetics at the ESME Engineering School in Paris and was radar antenna R&D engineer with THOMSON-CSF (1968-1973). He joined ESRO (now ESA) in 1973 where he initiated and supervised for many years R&D and project support for space antennas. In 1993, he became Head of the Electromagnetics Division. He has authored or co-authored over 150 papers and holds 20 patents in the field of antennas. This has included aspects of wideband communications, broadcasting, radar and satellite antennas, with emphasis on log-periodics, reflect-arrays, multi-beam reflectors and arrays as well as advanced antenna feed networks. In 2005 he received the Doctorate Honoris Causa from the Technical University of Delft for his contributions to the field of antennas and to the antenna community in Europe. Now he is part time scientific advisor at Delft University of Technology.