

## Seminar über Microwave Physics and Atmospheric Physics

**Referent/in:** José Barbosa, Ioannis Nestoras  
RDA – Research and Development in Aerospace GmbH

**Titel:** Radiometer Level 1 Data Processing for ESA Missions

E2E simulators are tools which allow to estimate scientific performance by simulating the end-to-end mission chain, i.e. from the observed space scene to the retrieved physical parameters. In this talk, the application of these simulators to representative radiometer missions will be reviewed.

An End-to-End simulator reference architecture will be shown as well as the definition of the typical processing data levels in an ESA mission. Then the instrument designs, calibration strategies and typical sources of error – as well as the algorithms for their mitigation – will be reviewed for SMOS, MWI/ICI and MWS (METOP-SG), CIMR (Copernicus) and, of course, AWS.

Particular emphasis will be given to sidelobe corrections, which is one of the hardest and most computational expensive corrections in radiometer data processing.

**Zeit:** Freitag, 11. März 2022, 10:15 Uhr

**Ort:** Raum A97, ExWi, Sidlerstrasse 5, 3012 Bern  
<https://unibe-ch.zoom.us/j/97081325603?pwd=d0ozME5xOS9pQVNxallLem81VHQyZz09>  
Meeting ID: 970 8132 5603  
Passcode: iapmw