

Telemeter Electronic with partners Satimo and Orbit/FR organizes a seminar „Antenna measurement systems” in cooperation with Czech Technical University in Prague (Department of Electromagnetic Field) under the auspices of prof. Ing. Miloš Mazánek, CSc.

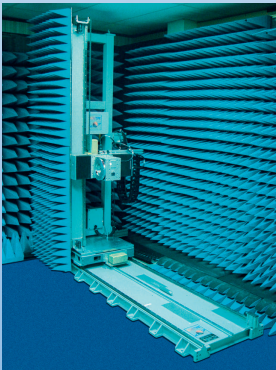
## ANTENNA MEASUREMENT SYSTEMS



### Location:

Czech Technical University  
Faculty of Electrical Engineering  
Technická 2  
166 27 Prague 6

Conference room N. 80



### Program:

9:00 - 9:30: Registration and seminar opening  
9:30 - 10:15: Topic 1 (in czech)  
10:15 - 10:30: Coffee break  
10:30 - 11:45: Topic 2 & Topic 3 (in english)  
11:45 - 13:00: Lunch  
13:00 - 14:00: Visit of laboratories & Presentation of SATIMO, ORBIT/FR and AEMI's product portfolio  
14:00 - 15:00: Topic 4 & Topic 5 (in english)  
15:00 - 15:15: Coffee break  
15:15 - 16:00: Topic 6 (in english) - final discussions

Language of the seminar: english, czech

Lecturers: Tomáš Kořínek (CTU)

Marcel Boumans (ORBIT/FR Germany, Director)

Per Noren (Deputy Sales Director, Microwave Vision Group)

The number of participants is limited, therefore a registration is required. Registration form is available at [www.telemeter.cz](http://www.telemeter.cz). Please, send the filled in form to [info@telemeter.cz](mailto:info@telemeter.cz) or to fax +420 385 510 124 until 10<sup>th</sup> November 2010.

### Topics:

- **Topic 1: Antenna measurements at the Department of Electromagnetic Field** (ČVUT, Tomáš Kořínek) in czech  
Presentation is going to provide basic information on measurement methods of antenna parameters, including practical examples of measurement carried out in anechoic chamber at the Department of Electromagnetic Field. During the presentation will be discussed experiences in using of the measurement and control system (software and hardware) at the Department of Electromagnetic Field.
- **Topic 2: Near field and far field antenna measurements – system design aspects and future perspectives** (ORBIT/FR, Marcel Boumans)  
This presentation gives insight into the design parameters and performance of near field and far field antenna measurement systems, both conventional systems and state of the art solutions.
- **Topic 3: Benefits of fast measurements in antenna design** (SATIMO, Per Noren)  
This presentation gives an example of a high precision antenna design, focusing on the utilization of fast antenna measurement system in the design process. The iterative design process of an ARGOS reference base station antenna is presented in detail.
- **Topic 4: Compact range design aspects** (ORBIT/FR, Marcel Boumans)  
Overview of compact range design trade-offs, cost drivers and measurement uncertainty. Special attention will be given to “mini” compact ranges and also to the use of multiple feeds for improved quiet zone performance
- **Topic 5: Multi-probe array in compact range** (ORBIT/FR, Marcel Boumans)  
Multiple feeds can be used to improve compact range quiet zone performance, and to make instantaneous snapshots of a segment of the radiation pattern of the antenna under test. This presentation will show results from existing installations, as well as future perspectives.
- **Topic 6: Measuring MIMO terminals** (SATIMO, Per Noren)  
Due to mobile network saturation, wireless devices are evolving rapidly to integrate MIMO technology. This presentation will give an overview of the main technical challenges to measure MIMO devices as well as the solutions currently existing on the market, with their pros and cons.