



## Date:

April 3rd - April 7th, 2006.

## Place:

[Universität Karlsruhe \(TH\)](#), [Institut für Höchstfrequenztechnik und Elektronik](#), [Karlsruhe](#), Germany.

## Addressed audience:

PhD students and scientists (including participants from industry). The course is strictly limited to a number of 20 participants. PhD students have the possibility of obtaining 3 ECTS credits from an exam.

## Course fees:

ACE members: 200 €  
University members: 400 €  
Other participants (industry): 1000 €

## Short description:

The topics addressed are Ultrawideband (UWB) system aspects with a special focus on ultra wideband antennas. This includes the characterization and the design of a large variety of UWB antennas. The course embeds the antennas in state of the art UWB systems for communication applications including transmitter and receiver structures as well as radar sensors and systems.

## Teachers:

Prof. Werner Wiesbeck (IHE, Universität Karlsruhe)  
Prof. Friedrich Jondral (INT, Universität Karlsruhe)  
Prof. Luis Jofre (Universitat Politècnica de Catalunya)  
Dr. Andrea Neto (TNO)  
Dipl.-Ing. Michael Eisenacher (INT, Universität Karlsruhe)  
Dipl.-Ing. Werner Sörgel (IHE, Universität Karlsruhe)  
Dipl.-Ing. Christian Sturm (IHE, Universität Karlsruhe)

## Schedule:

	Monday, 03.04.	Tuesday, 04.04.	Wednesday, 05.04	Thursday, 06.04	Friday, 07.04
08:30 - 10:00	Registration	Impulse Transceivers <i>Jondral</i>	UWB Antennas II <i>Wiesbeck</i>	UWB Beamforming and Arrays <i>Wiesbeck</i>	Measurement Techniques <i>Wiesbeck</i>
10:30 - 12:00	Introduction and Overview <i>Wiesbeck</i>	Multiband-OFDM <i>Jondral</i>	UWB Antennas III <i>Wiesbeck</i>	Leaky Lens <i>Neto</i>	UWB Interference <i>Wiesbeck</i>
Lunch					
13:00 - 14:30	Channel Models <i>Wiesbeck</i>	Exercise Channel Mod. <i>St/Sö</i>	Exercise UWB Antenna Design <i>Sö/St</i>	UWB Radar & Imaging <i>Jofre</i>	Exam
15:00 - 16:30	UWB Antennas I <i>Wiesbeck</i>	Exercise Channel Mod. <i>St/Sö</i>	Exercise UWB Antenna Meas <i>Sö/St</i>	Exercise UWB Sensor Network <i>Romeu</i>	plenary session

## Contact:

Registration: Simone Gorre: [simone.gorre@ihe.uka.de](mailto:simone.gorre@ihe.uka.de)  
Content: Christian Sturm: [christian.sturm@ihe.uka.de](mailto:christian.sturm@ihe.uka.de)

## Travel information:

The course will be held at the [Gastdozentenhaus Heinrich Hertz](#). The Gastdozentenhaus is located on the [university campus](#) in building 01.52. Travel information to the university is provided [here](#). The Gastdozentenhaus offers a limited number of rooms. Further links to hotels will be provided soon.

Further information will be provided at: [www.ihe.uni-karlsruhe.de/uwbcourse](http://www.ihe.uni-karlsruhe.de/uwbcourse)