

Date:

March 27 – March 31, 2006

Place:

[European Space Research and Technology Centre \(ESTEC\)](#), Noordwijk, The Netherlands.

Addressed audience:

PhD students and scientists (including participants from industry). The course is strictly limited to a maximum of 30 participants.

Course fee:

ACE (Antenna Centre of Excellence) members: 200 €

University members: 400 €

Other participants (Industry): 1000 €

Short description:

The aim of the course is to give an overview of design approaches, constraints and technical solutions for Space Antennas, addressing both theoretical and technological issues. The course will focus on main space applications such as telecommunication, earth observation and science but will also address other uses of antennas for space. The lectures will cover radiofrequency, mechanical and thermal design, material technology and test aspects, ending with a visit to ESTEC satellite and antenna test facilities.

Teachers:

Cyril Mangenot (ESA-ESTEC – Head of Antenna and Sub-millimetre wave Section)

Marco Sabbadini (ESA-ESTEC – Antenna and Sub-millimetre wave Section)

Luca Salghetti Drioli (ESA-ESTEC – Antenna and Sub-millimetre wave Section)

Peter de Maagt (ESA-ESTEC – Antenna and Sub-millimetre wave Section)

Julian Santiago Prowald (ESA-ESTEC – Mechanical Structure Section)

Piermario Besso (ESA-ESOC – Ground Station Antennas Section)

Preliminary schedule:

Date	Hours	Topics	Lecturers
Monday 27 March	09:00 - 13:15	Introduction Fundamental/Basics of Antennas	CM CM/MS/LSD
	14:00 - 17:15	Telecommunications: Project introduction and perspectives Antennas for Fixed Telecommunications	PLG/SL MS
Tuesday 28 March	09:00 - 13:15	Antennas for Broadband Telecommunications Mechanical/Thermal design and analysis of antennas for Space Applications	CM JSP
	14:00 - 17:15	Antennas for Mobile Telecommunications User Terminals for Mobile Telecommunications Presentation of the GRASP antenna software	MS LSD TICRA
	18:00 - 20:00	Welcome Cocktail	All
Wednesday 29 March	09:00 - 13:15	Earth Observation: Project introduction and perspectives Passive instruments for earth Observation (Radiometer)	YM/EN MS
	14:00 - 17:15	Active instruments for earth Observation (SAR and wind scatterometer) Active instruments for earth Observation (Altimeter)	CM LSD
Thursday 30 March	09:00 - 13:15	Science: Project introduction and perspectives Passive instruments for Science	JR/PPC PDM
	14:00 - 17:15	TTC and Data Transmission Antennas Ground Segment Antennas Presentation of the ADF/EMS antenna software	LSD PMB IDS
	19:00 - 23:00	Social Dinner	All
Friday 31 March	09:00 - 13:15	Other applications: Navigation Other applications: Data relay Other applications: Manned missions / ISS Mechanical/Thermal test techniques of antennas for Space Applications	LSD MS MS JSP
	14:00 - 17:15	Visit of ESTEC Test Facilities	All

Contact:

Registration: ESA.Conference.Bureau@esa.int

Content: Mr. Cyril Mangenot: cyril.mangenot@esa.int

Travel information:

The course will be held at ESTEC establishment in Noordwijk. Travel information to the site is provided [here](#).

Further information will be provided at: <http://www.congrex.nl/06m13/>