

European Courses on Microwaves (EuCoM)



MICROWAVE FILTERS AND MULTIPLEXING NETWORKS FOR SPACE COMMUNICATION SYSTEMS



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

Technical University of Valencia (UPV), Valencia, Spain - 5-9 May, 2014

The European Microwave Association (EuMA) and the Technical University of Valencia (UPV) organize a Course on Microwave Filters and Multiplexing Networks for Space Communication Systems. Senior researchers from European Universities and the European Space Agency (ESA), as well as experts from Space Industries, will participate in the following programme:

MONDAY, 05/05/2014

9:00 Introduction to the Course | Microwave Filters and
13:30 Multiplexing Networks in Space | System Perspective

15:30 Synthesis Techniques of Microwave Filters: The Basics
18:00

TUESDAY, 06/05/2014

9:00 Synthesis Techniques of Microwave Filters: the Cohn's Method
13:30 and the Coupling Matrix | Advanced Filter Topologies using
Coupling Matrix Synthesis

15:30 Analysis, Synthesis and Optimization of Waveguide Filters
18:00 using EM Software Tools

WEDNESDAY, 07/05/2014

9:00 Miniaturized Filters for Space Applications | Planar and
13:30 Substrate Integrated Waveguide (SIW) Filters |
Introduction to Reconfigurable Filters

15:30 Filters and Switches for Reconfigurable Payloads |
18:00 FEST 3D: an EM-based Software Tool for the Analysis,
Synthesis and Design of Passive Space Hardware

THURSDAY, 08/05/2014

9:00 Multiplexing Networks for Satellite Communication Systems |
13:30 Filters and Multiplexers for Earth Stations and Wireless
Communications | Waveguide and Coaxial Low-Pass Filters

15:30 Coupled-Mode Theory: Advanced Waveguide Low-Pass Filters
18:00 for High-Power Applications | FEST 3D & SPARK 3D: EM-based
Software Tools for Modelling RF High Power Effects

FRIDAY, 09/05/2014

9:00 Practical Considerations of Filters and Multiplexers |
13:30 Multipaction, Corona and Passive Inter-modulation Effects

15:30 Visit to ESA-VSC Facilities (European High Power RF Space
18:00 Laboratory) | Conclusions and End of the course

INVITED SPEAKERS

- Prof. Dr. Raafat Mansour - University of Waterloo
- Dr. Chandra Kudzia - University of Waterloo
- Mr. Richard Cameron - IEEE MTT-S Fellow and Distinguished Lecturer
- Dr. Marco Guglielmi - European Space Agency
- Mr. David Raboso - European Space Agency
- Dr. Carlos Vicente - AURORASAT
- Dr. Jordi Gil - AURORASAT

And local speakers from Universities and Organizations:

- Microwave Applications Group (iTEAM and I3M) - UPV
- Microwave Components Group - Public University of Navarre
- University of Valencia
- Val Space Consortium

ORGANIZING COMMITTEE

- Prof. Vicente E. Boria - Technical University of Valencia
- Prof. Alessandro Galli - University of Rome, La Sapienza
- Dr. Chandra Kudzia - University of Waterloo
- Dr. Marco Guglielmi - European Space Agency
- Prof. Roberto Sorrentino - University of Perugia, RF MicroTech
- Prof. Benito Gimeno - University of Valencia
- Mr. David Raboso - European Space Agency
- Mr. David Argilés - Val Space Consortium
- Mrs. Cristina García - Technical University of Valencia

REGISTRATION FEES AND OTHER INFORMATION

❖ Students (EuMA members*)	350 €
❖ Students	400 €
❖ Others (EuMA members*)	550 €
❖ Others	650 €

The registration fee includes: 1 paper copy of the presentations, lunches, refreshments and gala dinner. **Registration deadline: 31/03/2014.**

*To become an EuMA member visit: www.euma.org

VENUE: the course will be held at the Technical University of Valencia, located in the city of Valencia, Spain. More information: www.upv.es

ECTS CREDITS: for European PhD students, a one week course may be eligible for 2 ECTS credits, provided these are accredited by the University and/or PhD advisor.

GRANTS: up to 3 PhD students will get the registration fee granted. Applicants shall send their CV to magarpe4@iteam.upv.es

MORE INFORMATION AND REGISTRATION: www.gam.upv.es

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Collaborating entities:

