

FIMU4SPACE

5-DAYS COURSE ON MICROWAVE FILTERS AND MULTIPLEXING NETWORKS FOR SPACE COMMUNICATION SYSTEMS

Universitat Politècnica de València (UPV), Valencia (Spain), 25-29 November 2019

The European Microwave Association (EuMA), the Technical University of Valencia (UPV) and the European Space Agency (ESA) 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, 25/11/2019

9:00	Introduction to the Course Technologies, Applications, Design and Manufacture Telecommunication, Navigation and Earth Observation Payloads
13:30	
14:30	The System Perspective and Practical Tradeoffs Synthesis Techniques of Microwave Filters – The Basics
18:20	

TUESDAY, 26/11/2019

9:00	Synthesis Techniques of Microwave Filters: Coupling Matrix Advanced Coupling Matrix Synthesis Techniques
13:30	
14:30	Analysis and Design of Microwave Filters CST STUDIO SUITE & FEST3D: EM Software Tools for the Analysis, Synthesis and Design of Microwave Components
18:20	

WEDNESDAY, 27/11/2019

9:00	Microwave Filters in Planar and Hybrid (SIW and Empty SIW) Technologies Optimization Methods for Designing Microwave Filters (Practical Cases)
13:30	
14:30	Compact and Advanced Filter Topologies Reconfigurable Compact Filters in Planar and SIW Technologies
18:40	

THURSDAY, 28/11/2019

9:00	Multiplexing Networks for Satellite Communication Systems – Design Considerations and Perspective Synthesis Methods for Multiband Combiners
13:30	
14:30	Waveguide and Coaxial Low-Pass Filters: An Introduction Low-Pass and Band-Pass High-Power Filters Synthesis of Microwave Devices based on the Coupled-Mode Theory
18:00	

FRIDAY, 29/11/2019

9:00	Practical Considerations for Implementing Microwave Filters and Multiplexers Advanced Manufacturing Processes of Filters Acoustic Filters: An Overview
13:30	
14:30	RF discharge Effects and Passive Inter-modulation: ESA-VSC Activities SPARK3D & CST PARTICLE STUDIO: EM Software Tools for Modelling RF High Power Effects Visit to ESA-VSC High Power RF Space Laboratory Conclusions
18:00	

Collaborating entities:

INVITED SPEAKERS

- Dr. Chandra Kudsia – University of Waterloo
- Mr. Richard Cameron – IEEE MTT-S Fellow & Distinguished Lecturer
- Prof. Cristiano Tomassoni – University of Perugia
- Prof. Giuseppe Macchiarella – Politecnico di Milano
- Prof. Jordi Mateu – Technical University of Catalonia
- Dr. Carlos Vicente, Dr. Richard Cousin – Dassault Systemes España
- Dr. Theunis Beukman – Dassault Systemes Deutschland

And other speakers from participating Universities and Organizations:

- Microwave Applications Group (iTEAM and I3M) – UPV
- Microwave Components Group – Public University of Navarre
- European Space Agency – ESTEC

ORGANIZING COMMITTEE

- Prof. Vicente E. Boria – Technical University of Valencia
- Mr. Petronilo Martin-Iglesias – European Space Agency
- Dr. Cesar Miquel, Mrs. Jaione Galdeano – European Space Agency
- Dr. Piero Angeletti, Mr. David Raboso – European Space Agency
- Dr. Chandra Kudsia – University of Waterloo
- Dr. Marco Guglielmi – Technical University of Valencia
- Prof Miguel Angel Gomez-Laso – Public University of Navarre
- Mr. David Argiles – Val Space Consortium
- Mrs. Maria Bayarri – Technical University of Valencia

❖ Students (EuMA members*)	400 €
❖ Students	450 €
❖ Others (EuMA members*)	750 €
❖ Others	800 €

Registration fees include 1 electronic copy (USB) with presentations, lunches, refreshments, gala dinner. **Registration Deadline: 10/11/2019.**

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

VENUE: the course will be held at the Technical University of Valencia (UPV), located in Valencia, Spain. More information on: <https://www.upv.es/>

ECTS CREDITS: for European PhD students, a one week course may be eligible for 2 ECTS credits, provided that 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 mababel@iteam.upv.es

MORE INFORMATION AND REGISTRATION: FIMU4SPACE website