



Section France

French MTT Chapter



CENTRE NATIONAL D'ÉTUDES SPATIALES



Centres de Compétence Technique

International Workshop on Microwave Filters

16-18 October 2006

CNES, Toulouse, France

co-organised by CNES and ESA

FIRST CALL FOR PAPERS

CONTEXT

Satellite telecommunication systems continue to play a major role in broadcasting services and provide important point to point communication. The continued demand to improve the traffic flow capacity and efficiency of telecommunication satellite payloads is triggering many technological improvements. In the area of microwave filters, standard hardware such as input multiplexers, output multiplexers and planar filters are experiencing a growing maturity, whereas surface acoustic wave, film bulk acoustic and micro-machined filters have just started to emerge for the space market. Satellite payload hardware needs to withstand severe mechanical and thermal conditions while maintaining all electrical specifications. This requires accurate CAD tools and methodologies for analysis, design and optimisation to reduce time to market and production cost.

In response to the ongoing developments of flexible payloads a session is reserved for presentations and discussions on the impacts of flexible payload architectures on filter requirements and new hardware such as frequency and bandwidth reconfigurable filter networks.

For this 3rd co-organised CNES and ESA workshop on Microwave Filters it is called for papers in the area of Microwave Filter theory, design, analysis, optimization and fabrication including mechanical challenges such as temperature compensation techniques.

TOPICS

The following list of topics, which is not exhaustive, reflects the main areas which will be addressed during the workshop. Authors are encouraged to submit papers on topics they consider relevant, even if they are not explicitly mentioned below:

- Planar filter
- Micromachined filter
- Active filter
- Reconfigurable and tuneable Filter Networks
- SAW/BAW filter
- Waveguide filter
- Multiplexing devices
- High power filter

- Filters for millimetre-wave applications
- Dielectric resonator filter
- EBG and metamaterial filter
- Superconductor filter
- LTCC filters
- FBAR filters
- Filter synthesis (classical synthesis but also global function synthesis)
- Filter analysis
- Filter optimisation
- Computer Aided Design (electromagnetic tools, synthesis based tools, multi-physics based tools...)
- Thermal; mechanical and power capabilities

Abstract submission

Abstracts shall not be longer than 2 pages (including pictures). They should contain the following information :

- Name and proposed topic for the paper
- Title of the paper
- Authors full name
- Address, email, telephone and fax numbers
- Name of contact person
- Summary of the paper

The abstract shall clearly outline the major interests and novelties of the paper.

Abstract submission is requested in electronic form (pdf file) to the organising committee at the following email address: iwmf2006@cnes.fr

Deadline for abstract submission: **14th July 2006**

Notification of acceptance: 4th of September 2006.

Full length paper submission

For this workshop full length paper submission is encouraged but optional. Full length papers will be included on the workshop CD together with the presentation.

Fees

Participation to this workshop is made through registration. There is no fee associated.

Proceedings

The abstract proceedings will be available for the conference.

The final workshop proceedings will contain the final presentations and the optional full length papers. A CD version of the final workshop proceedings will be sent within 3 months after the workshop to all participants.

Calendar of events

14th July 2006	Deadline for submission of abstracts
4th September 2006	Authors notification
4th October 2006	Deadline for registration and submission of optional full length paper version
16th – 18th October 2006	Workshop at CNES (Toulouse, France)

Organisation of the workshop

The workshop will be organised in plenary sessions with oral presentations. Software and microwave hardware demonstration is welcome. Please contact the organising with your request.

A PC, a slide projector and a video projector will be available.

Presentations and discussions will be carried out in English.

Plenary session

Ideas and wishes can be considered until 28th April 2006. Please contact the organising committee with your request.

Hotel

A list of hotels will be provided upon request.

Organising Committee

Email address for paper submission: iwmf2006@cnes.fr

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