

## SPACOMM 2012

### Foreword

The Fourth International Conference on Advances in Satellite and Space Communications [SPACOMM 2012], held between April 29th and May 4th, 2012 in Chamonix / Mont Blanc, France, continued a series of events attempting to evaluate the state of the art in academia and industry on the satellite, radar, and antennas based communications bringing together scientists and practitioners with challenging issues, achievements, and lessons learnt.

Significant efforts have been allotted to design and deploy global navigation satellite communications systems. Satellite navigation technologies, applications, and services still experience challenges related to signal processing, security, performance, and accuracy. Theories and practices on system-in-package RF design techniques, filters, passive circuits, microwaves, frequency handling, radars, antennas, and radio communications and radio waves propagation have been implemented. Services based on their use are now available, especially those for global positioning and navigation. For example, it is critical to identify the location of targets or the direction of arrival of any signal for civilians or on-purpose applications; smart antennas and advanced active filters are playing a crucial role. Also progress has been made for transmission strategies; multiantenna systems can be used to increase the transmission speed without need for more bandwidth or power. Special techniques and strategies have been developed and implemented in electronic warfare target location systems.

We take here the opportunity to warmly thank all the members of the SPACOMM 2012 Technical Program Committee, as well as the numerous reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to SPACOMM 2012. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the SPACOMM 2012 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that SPACOMM 2012 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of satellite and space communications.

We are convinced that the participants found the event useful and communications very open. We also hope the attendees enjoyed their stay in the French Alps.

#### **SPACOMM Advisory Committee:**

Stelios Papaharalabos, ISARS/National Observatory of Athens, and Athens Information Technology (AIT), Greece

Piotr Tyczka, Poznan University of Technology, Poland

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