

SUMMER SCHOOL on Signal Processing for Next Generation Satellite Communications 2016 (SPNGS 2016)

The school of signal processing techniques for next generation satellite systems was organized from the 25th to the 27th of April, 2016, in Ghent, Belgium. There were 26 attendees from both industry and academic institutions. The goal of the school was to present the current schemes that are implemented in today's satellite equipment, as well as advanced techniques that will support **Next generation satellite systems**, with a main focus on **High Throughput Satellites**. The school's program consisted of 6 short courses and 3 keynotes from renowned international professors and industry experts. The speakers and the titles of their respective talks are listed below:

- **Dr. Hector Fenech** (Head of Future Satellite Systems Group, Eutelsat): High Throughput Satellites: A Theoretical Approach.
- **Mr. Christophe Nussli** (Thales Alenia Space): Is there any room for satellite technologies in 5G?
- **Mr. Glynn Thomas** (Payload Product Manager and Senior Expert, Airbus Defense and Space): Flexible High through Satellite Payloads.
- **Dr. Nele Noels** (Researcher at University of Ghent): Detection and Channel estimation in Satellite Multiuser Communication.
- **Prof. Ana Isabel Pérez-Neira** (Scientific Director of Centre Tecnològic de les Telecomunicacions de Catalunya): Interference Mitigation Techniques in Multibeam Satellite Systems.
- **Dr. Sandro Scalise** (Head of Satellite Communication Department at DLR): Protocol design of satellite machine type communications.
- **Dr. Alberto Ginesi** (Head of the Communication-TT&C Systems & Techniques Section of ESA): System Analysis and Architectures of Next Generation High Throughput Satellites.
- **Dr. Riccardo De Gaudenzi** (Head of the Radio Frequency Systems, Payload and Technology Division of ESA): Random access for satellite machine type communications.
- **Dr. Joel Grotz** (Senior Manager, SES): The role and challenges of satellite systems in future communication networks.
- **Dr. Nader Alagha** (Senior Manager, ESA): The role of satellite in the emerging maritime VHF data exchange system

In general, we believe the school in Ghent can be considered a success. The speakers were top quality and the attendees have been very interactive with them. The majority of attendees was very satisfied with the school and would be interested in a follow-up summer school next year on a related topic..

