RFI 2019
Coexisting with Radio Frequency Interference
Toulouse, France
September 23-26, 2019

IMPORTANT DATES AND DEADLINES

- Abstract submission deadline:
  May 31, 2019
- Paper acceptance notification:
  July 15, 2019
- Author registration:
  August 15, 2019
- Conference:
  September 23-26, 2019
- Proceedings submission:
  October 15, 2019

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- Authors will have the opportunity to submit a paper on their work and have it published as part of the conference proceedings after peer review
- More information will be available on the workshop website at **www.rfi2019.org**

CONTEXT

With the ever growing demand for electromagnetic spectrum by commercial radio services, Radio Frequency Interference (RFI) is increasing and now represents one of the major threats to scientific uses of the spectrum. This is particularly true for passive applications such as radio astronomy, microwave remote sensing of the Earth and space weather applications, where highly sensitive measurements are necessary and can be easily corrupted by RFI, but it is also a problem for active instruments (e.g., radar systems) and in the transfer of data between satellite sensors and the ground. Protecting the spectrum for science, while at the same time accommodating the needs of commercial telecommunication, is a growing challenge.

RFI 2019 is the fifth in a series of workshops dealing with Radio Frequency Interference, the first of which took place in Bonn, Germany, in 2001. The primary goal will be to examine cases of observed RFI and report the latest research on detecting and reducing the impact of interference in radio astronomy and remote sensing. At the same time, this workshop will aim to promote interaction, exchange of ideas and points of views, and cooperation between researchers, engineers and users from all radio science disciplines dealing with RFI, uniting them under the common goal of working on solutions to minimise the impact of interference on users of the radio spectrum. The challenges of spectrum management and new technologies to accommodate competing interests will also be considered.

TOPICS OF INTEREST

Abstract submissions are invited on the following topics:

- Defining and quantifying RFI
- Spectrum management and frequency allocations processes
- Items of interest for researchers in the Agendas of WRC 2019 and 2023
- RFI spectrum monitoring from space for the bands used for science
- Radio Quiet Zones and electromagnetic interference
- SETI: separating terrestrial and extra-terrestrial transmissions
- RFI in passive and active remote sensing from space
- RFI in GNSS-R and signal of opportunity missions
- Interference in scientific RF Telemetry
- Mono and multi antenna signal processing
- RFI detection and prediction techniques, including Artificial Intelligence
- Flagging and excision techniques
- Pre- and post-correlation techniques
- Real-time implementation of RFI management in radio astronomy
- RFI monitoring and classification, and RFI databases
- Future sources of RFI
- Turning RFI into opportunities
- RFI detection techniques in telecommunications and their applicability to radio astronomy and remote sensing