



## Disruptive antennas based on emerging technologies for novel satellite telecommunication scheme

In the framework of the European School of Antennas (ESoA), we are pleased to announce the first edition of the course “Disruptive antennas based on emerging technologies for novel satellite telecommunication scheme” scheduled from the 25th to 29th of November, 2019 in Rennes, France.



Antenna technologies are core to space systems & services and central in defining the investment return for a wide range of satellite missions. As the frightening rates of concurrent advances in space-related services, business models and technologies are driving the space ecosystem to a new age, the need to re-invent antenna technologies for space is becoming increasingly urgent. While the sector is proactively looking for the next game changer, a whole new class of emerging and forecasted missions place urgent demands for drastic reduction in cost with a concurrent radical improvement in throughput, agility, volume/mass and power consumption. The European project REVOLVE (<http://revolve.eps.hw.ac.uk/>) is tackling such challenges.



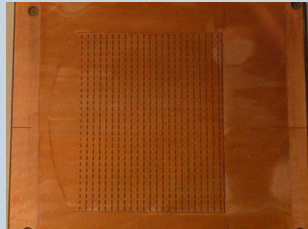
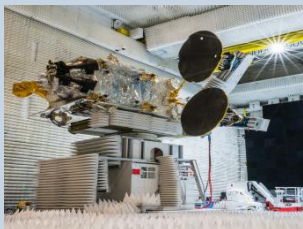
This PhD course is organized in the framework of the REVOLVE’s project to promote disruptive antenna technologies for emerging satellite missions.

### Topics:

- Antenna needs for space
- CubeSat and Telecom antennas
- Connected arrays for terminal antennas
- All-metal metasurfaces for space
- Optimization techniques for arrays
- Functional materials for space
- Precoding and interference management for satellite links
- Numerical tools for quasi-optical systems

### Instructors:

- Prof. D. Cavallo, TU Delft, NL
- Dr. N. Chahat, JPL-NASA, USA
- Dr. S. Chatzinotas, University of Luxembourg , LU
- Dr. M. Ettore, IETR, FR
- Dr. B. Fuchs, IETR, FR
- Dr. D. Gonzalez-Ovejero, IETR, FR
- Prof. G. Goussetis, HWU, UK
- Dr. H. Legay, TAS, FR
- Prof. V. Laur, Lab-STICC, FR



## 25 - 29 November 2019, IETR, Beaulieu Campus, Rennes, France

**Credits:** 2 ECTS for PhD Student

**1 Student grant of 1K€**  
sponsored by TICRA

**2 Registration grants**  
sponsored by SIMULIA & IETR

**Registration fees:**

PhD 440 €

Industry 880 €

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