

The European School of Antennas presents

## “Arrays and Reflectarrays”

The course will provide a global understanding of the electromagnetic behavior of antenna arrays and reflectarrays, with a special emphasis on wideband arrays, on the effects of mutual coupling, on optimization methods and on applications. A software for reflectarray analysis and design will be handed over to the students; many industrial examples will be provided.

**This course is aimed at postgraduate research students and industrial engineers who want to acquire insight into the physical behavior of antenna arrays and reflectarrays, as well as learn methodologies for array optimization**

<b>Date</b>	September 5-9, 2016
<b>Venue</b>	Louvain-La-Neuve, Belgium
<b>Credits earned</b>	2 ECTS credits (3 with passed exam)
<b>Web</b>	<a href="http://www.esoa-web.org/">www.esoa-web.org/</a>
<b>Contact</b>	<a href="mailto:christophe.craeye@uclouvain.be">christophe.craeye@uclouvain.be</a>
<b>Travel grants</b>	3

### Course Contents

- Reflectarrays
- Optimization techniques for array synthesis
- Unconventional array configurations
- Ultra-wideband arrays
- Timed arrays
- Array mutual coupling
- Numerical methods for arrays

### Lecturers

Prof. Sean Hum, Canada  
 Prof. Jose Antonio Encinar, Spain  
 Prof. Andrea Massa, Italy  
 Prof. Paolo Rocca, Italy  
 Dr. Hervé Legay, Thales, France  
 Prof. Raphaël Gillard, France  
 Prof. Andrea Neto, The Netherlands  
 Prof. Christophe Craeye, Belgium



### Schedule:

22 hours of classes  
 10 hours of practical sessions  
 1 labs and facilities tour  
 1 poster session (optional contribution)  
 The first course starts at 9.00 a.m., Sep. 5, 2016.

**Registration deadline:** July 29, 2016 on  
 by email (see below)  
 Registration includes welcome dinner and social event.

**Address:** UCL, ICTEAM Institute, Maxwell building,  
 Shannon room, Place du Levant, 3, 1348 LLN

## ESoA School on Arrays and Reflectarrays

### GENERAL INFORMATION



#### Prerequisites

Masters' level course in Electromagnetics  
 deeper background in antennas and microwaves is an advantage

#### Availability

Maximum 25 students

#### Registration Fees

Non-Profit Institution: € 440  
 Profit Institution: € 880

Cover classes and course material, welcome dinner, social event

#### Deadline

Registration by Friday July 29, 2016, online at by email to  
[Christophe.craeye@uclouvain.be](mailto:Christophe.craeye@uclouvain.be) with "ESoA grant" as subject.

#### Grants

Three grants will be offered to students from non-profit organizations. Please send your application by email to :  
[Christophe.craeye@uclouvain.be](mailto:Christophe.craeye@uclouvain.be) by July 29 (the email subject must be "ESoA grant"). Should include student's CV, research topic, and confirmation letter from the advisor explaining why a specific funding is requested.

The 3 applications receiving most attention will be ranked: the amounts of the grants will be 440 €, 380 €, 320 €, respectively. Still 1 grant available.

#### Lodging

20 rooms have been reserved at 35 €/night at Hotel Relais. To book, please send email to [christophe.craeye@uclouvain.be](mailto:christophe.craeye@uclouvain.be), with "ESoA lodging" as a subject.

#### Phone number

+32 10 472300 (urgent matters)