

The European School of Antennas presents

## “Arrays and Reflect-arrays”

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 and on optimization methods. A software for reflectarray analysis and design will be handed over to the students.

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

<b>Date</b>	Sept. 29 to Oct. 3d, 2014
<b>Venue</b>	Louvain-La-Neuve, Belgium
<b>Credits earned</b>	2 ECTS credits
<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

- Reflect-arrays
- Optimization techniques for array synthesis
- Unconventional array configurations
- Ultra-wideband arrays
- Timed arrays
- Array mutual coupling
- Numerical methods for arrays
- SAR processing and interferometry

### Lecturers

Prof. Sean Hum, Canada  
 Prof. Giorgio Franceschetti, Italy  
 Prof. Jose Antonio Encinar, Spain  
 Prof. Andrea Massa, Italy  
 Prof. Giacomo Oliveri, Italy  
 Prof. Raphaël Gillard, France  
 Prof. Andrea Neto, The Netherlands  
 Prof. Christophe Craeye, Belgium



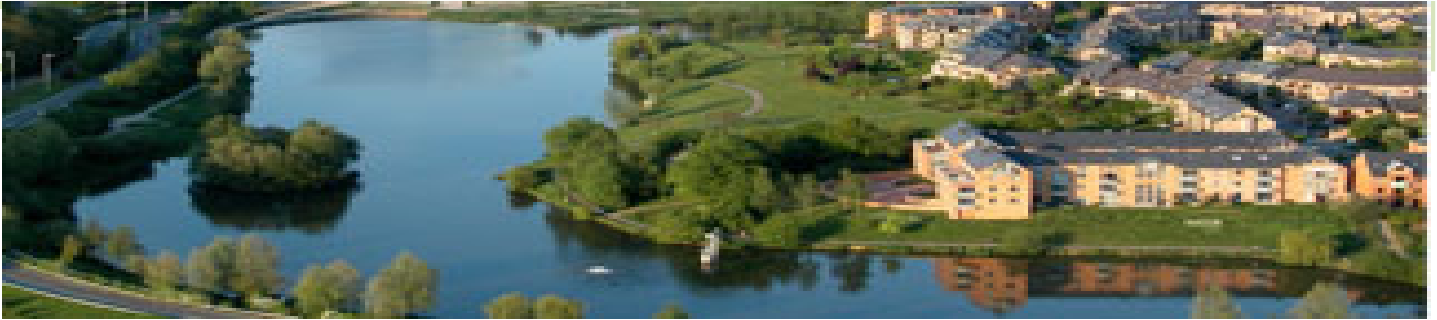
### Schedule:

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. 29, 2014.

**Registration deadline:** August 22, 2014 on  
<http://www.antennasvce.org/Community/Education/Courses>  
 Registration includes welcome dinner and social event.

**Address:** UCL, ICTEAM Institute,  
 Avenue Georges Lemaître, 4, 1348 LLN

## ESoA School on Arrays and Reflect-Arrays



### GENERAL INFORMATION

<b>Prerequisites</b>	Masters' level course in Electromagnetics deeper background in antennas and microwaves is an advantage
<b>Availability</b>	Maximum 25 students
<b>Registration Fees</b>	Non-Profit Institution: € 440 Profit Institution: € 880 Cover classes and course material, welcome dinner, social event
<b>Deadline</b>	Registration by Friday August 22, 2014, online at <a href="http://www.antennasvce.org/Community/Education">http://www.antennasvce.org/Community/Education</a>
<b>Grants</b>	Three grants will be offered to students from non-profit organizations. Please send your application by email to : <a href="mailto:Christophe.craeye@uclouvain.be">Christophe.craeye@uclouvain.be</a> by June 30 (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. Answers will be provided by July 30.
<b>Lodging</b>	10 rooms have been reserved at 30 €/night at Hotel Relais, they will be made available to the first 10 registrants. Please send email to <a href="mailto:christophe.craeye@uclouvain.be">christophe.craeye@uclouvain.be</a> , with "ESoA lodging" as a subject.
<b>Phone number</b>	+32 10 472300 (in case of emergency only)