



14th European Doctoral School on Metamaterials 30-31 August 2009

Queen Mary, University of London, Mile End Road, London, UK

This course of the European School on Metamaterials operated by the Metamorphose Virtual Institute will be held in conjunction with the [Metamaterials'2009 Congress](#) (August 30-September 4, 2009). This event will present a unique opportunity for students and young researchers to get exposure to the latest advancements in the field of metamaterials and to meet the leading experts in this explosively developing field. The lectures will be delivered by key speakers of the Congress who will address the fundamental problems in the area of artificial electromagnetic materials.

Course Contents

This course will cover various topics and issues related to metamaterials including:

- Fundamental electromagnetics of metamaterials
- Theory of transformational electromagnetics
- Numerical techniques and modeling of electromagnetic cloaks
- Applications of transformational electromagnetics

Who Should Attend This Course?

This course is aimed at postgraduate research students, academics and industrial engineers who are interested in theoretical and practical aspects related to metamaterials.

Speakers and Lecturers

- [Prof. Sir John B Pendry](#), Imperial College London, UK
- [Prof. Ari Sihvola](#), Helsinki University of Technology, Finland
- [Prof. Ulf Leonhardt](#), University of St Andrews, UK
- [Prof. Sergei Tretyakov](#), Helsinki University of Technology, Finland
- [Prof. Yang Hao](#), Queen Mary, University of London, UK
- [Prof. Raj Mittra](#), Pennsylvania State University, USA
- [Assistant Prof. Andrea Alu](#), The University of Texas at Austin, USA
- [Prof. Nader Engheta](#), University of Pennsylvania, USA

General Information & Fees

Schedule:

- 16 hours of teaching
- 8 lessons

Prerequisites:

- Basic mathematical theory
- Basic electromagnetic theory

***The course gives one European credit point

Course Outline & Timetable

- The first day of the course on **Sunday 30th August 2009** will include a whole day of lectures followed by the School's banquet.
- Course registration will take place on Sunday 30th August in room **207 (second floor), Electronic Engineering building, QMUL.**
- Course lectures and presentation will take place in room **209 (second floor), in Electronic Engineering building, QMUL.**
- **Sessions plan and course timetable** (see below provisional timetable)

Provisional timetable:

	Sunday 30 th August	Monday 31 st August
8:30-9:00	Welcome, Registration, Coffee	
9:00-9:50	Prof. Sir John B Pendry	Prof. Nader Engheta
10:00-10:50	Prof. Sir John B Pendry	Prof. Nader Engheta
10:50-11:10	Coffee break	
11:10-12:00	Prof. Ari Sihvola	Assistant Prof. Andrea Alu
12:10-13:00	Prof. Ari Sihvola	Assistant Prof. Andrea Alu
13:00-14:20	Lunch break	
14:20-15:10	Prof. Ulf Leonhardt	Prof. Raj Mittra
15:20-16:10	Prof. Ulf Leonhardt	Prof. Raj Mittra
16:10-16:30	Coffee break	
16:30-17:20	Prof. Sergei Tretyakov	Prof. Yang Hao
17:30-18:20	Prof. Sergei Tretyakov	Prof. Yang Hao
19:30-----	Banquet Dinner	Conference Pre-Registration Reception

Registration

Registration fees for the school should be paid via the Congress web site,
<http://congress2009.metamorphose-vi.org/content/view/26/31/>

Registration Fees: The METAMORPHOSE School

Early registration (till June 30, 2009)

Students	190 €
Academic participants	290 €
Non-academic participants	380 €

Late registration (from July 1, 2009)

Students	240 €
Academic participants	340 €
Non-academic participants	430 €

Venue

The course lectures will take place in the premises of:

[The School of Electronic Engineering and Computer Science
Queen Mary, University of London](#)

Mile End Road
London E1 4NS
United Kingdom

Information on how to get here and detailed maps can be found on:

<http://congress2009.metamorphose-vi.org/content/view/33/38/> and
<http://congress2009.metamorphose-vi.org/content/view/32/37/>

Accommodation

Information on the accommodation can be found on:

<http://congress2009.metamorphose-vi.org/content/view/30/35/>

Full information about the course will be published at the dedicated page of the METAMORPHOSE Virtual Institute Doctoral Programme web site:

<http://school.metamorphose-vi.org/> (click on "14th school" in the left menu).