

Strasbourg, France

June 27 - July 5, 2010

European Summer Campus

Metamaterials

“WHY LIGHT BENDS THE WRONG WAY”

“WHY THINGS DON'T FALL DOWN”



Negative refraction
“why light bends the wrong way”
Aloyse Degiron, Orsay

Photon sieve
Cyriaque Genet, Strasbourg

Photonic crystals and photonic metamaterials
Kurt Busch and Martin Wegener, Karlsruhe

Structural metamaterials
“why things don't fall down”
Yves Brechet, Grenoble

Soft metamaterials
Sergei Obukhov, Gainesville

Cytoskeleton and motion of living cells
Ben Fabry, Erlangen

Elasticity of textile fabrics and yarns
Dominique Dupuis, Mulhouse

Auxetic metamaterials
Joseph N. Grima, Malta

Evening Lecture
Sir John Pendry, London

For Students in Physics having completed
3 years of university studies

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A Summer Campus

What is it?

European Summer Universities were proposed by the French Minister of Education in 2000 to encourage the mobility of students within Europe. In spring 2009 the name of the programme changed to “campus européen d’Été” or “European Summer Campus”.

9th European Summer Campus on Metamaterials is organised and financed by the physics faculty of the Université de Strasbourg (UdS), the Institute of Applied Physics of the Karlsruhe Institute of Technology (KIT) and the ENSISA of the Université de Haute Alsace (UHA), Mulhouse and several Institutes of the CNRS (IPCMS, ISIS, ICS, LSP and IPHC) with the support of the Minister for education and research, the region of Alsace and the city of Strasbourg.

The goal of the Summer Campus is twofold:

First we have a scientific programme explaining to you some of the exciting and very recent developments in the field of Metamaterials and its applications.

Second we would like to stimulate discussions between you, the other students, but also, very important, with the lecturers and the other researchers, who you will meet during this week.

We also have foreseen several excursions to give you the opportunity to learn about Europe, Strasbourg and Alsace.

Mme Anne Klebes-Pelissier,
Vice-president for International Relations

Jean-Pierre Münch,
Director of the UFR Physique et Ingénierie

Thomas Ebbesen
Director of ISIS and Professor at the UoS

Organization

How does it work

- **Conference Secretariat, [Annick Coulibaly](#) and [Monique Dell](#)**
- **Programme and Organizing Committee**
 - **Nicolas Rivier and Ulrich Goerlach, Prof., UdS, Strasbourg,**
 - **Martin Wegener, Prof., KIT**
 - **Dominique Dupuis, Prof. UHA**

Thierry Charitat, Cyriaque Genet, Stefan Haacke, Pascal Hébraud,
Charles Hirlimann, Zbigniew Kuznicki, Jean-Pierre Münch
- **Technical Support**
 - » **N. Busser (WWW), O. Hunzinger (PCs, WIFI)**
 - » **N. Rudolf and Ch. Helfer (vidéo recording)**
 - » **P. Gilbert, (Finance, papers)**
 - » **M. Schlee (Printing programme, posters etc.)**
 - » **C. Berger (IPHC, bags, badges etc.)**
- **Many others (coffees etc.)**

Scientific Programme

- Sessions of (2x45+15min) lectures
- Two tutorial for some basics and more questions
- Visit to the Institute of applied physics at the KIT
- Optional test to validate your attendance

- **PLEASE DO ASK QUESTIONS!!!**

Don't be afraid to speak incorrect English

You are coming from 23 different countries and with 26 different nationalities

Cultural and Social Programme

- Important part of this European Summer Campus
- Learn about Europe, the European Union and other countries (from the **other** students)
- Learn about Alsace
- Use the free time to explore Strasbourg