COST DENORMS CA15125 Training School

Sound waves in metamaterials and porous media

26-30th September 2016, CTU-FEE, Prague (CZ)

The First DENORMS (CA15125) Training School will be held on 26-30th September 2016 in Prague, Czech Republic. The Training School, co-organized by CTU-FEE and DENORMS, aims at providing a common theoretical background to researchers & engineers working on acoustic metamaterials, metasurfaces and sonic crystals as well as conventional acoustic materials.

The Training School is combined with Working Group meetings of the DENORMS Action.

Venue
Czech Technical University in Prague, Faculty of Electrical Engineering, Technická 2, 166 27 Prague 6 - Dejvice, Czech Republic

Registration
Registration is free of charge, please **register by 31st August 2016** by filling in the form available at www.denorms.eu/activities/

Grants
30 competitive COST grants will be awarded to PhD students or Early Career Investigators (researchers whose career spun less than 8 years since the date of the PhD) whose institutions are more than 200 km from Prague. An exception may be granted on the basis of special circumstances. **Deadline to apply for a grant is 20th August 2016.**

Grant amount
- Participation in only one session (either Session 1 or Session 2): 500 EUR.
- Participation in both sessions: 700 EUR.

Travel and accommodation
Trainees are expected to arrange their own travel and accommodation.

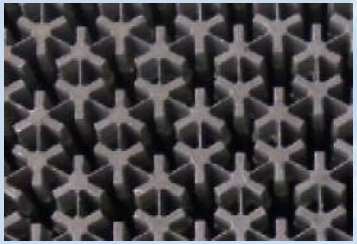
The school will cover the following topics:

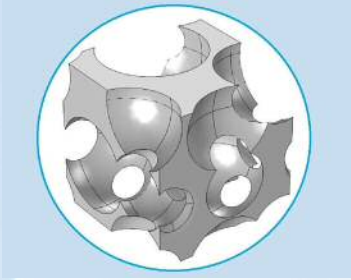
Session 1 (26–27th September) – Sound waves in periodic structures and metamaterials
- Irreducible Brillouin zone/dispersion relationship in periodic structures/Plane Wave Expansion method
- Multiple Scattering Theory
- Homogenization for periodic structures and metamaterials
- Sonic crystals
- Metamaterials for sound absorption

Session 2 (28–30th September) – Sound waves in viscothermal fluids & nonlinear propagation
- Generalities on acoustic wave propagation in viscothermal fluids and application to nonlocal homogenization
- Theory of homogenization applied to porous materials
- Numerical methods for porous media
- Examples of industrial use of porous materials
- Nonlinear acoustic wave propagation

Lecturers
- Dr. C. Boutin (École Nationale des Travaux Publics de l'État, France)
- Dr. F. Coulouvrat (Institut Jean le Rond d'Alembert, France)
- Prof. P. Göransson (KTH, Royal Institute of Technology, Sweden)
- Dr. D. Lafarge (Laboratoire d'Acoustique de l'Univ. du Maine, France)
- Prof. P. Martin (Colorado School of Mines, USA)
- Dr. V. Romero-García (Labor. d'Acoustique de l'Univ. du Maine, France)
- Prof. J. Sánchez-Dehesa (Univ. Politècnica València, Spain)
- Prof. P. Sheng (Univ. Hong-Kong, Hong-Kong, China)
- Prof. J. Vasseur (Univ. Lille 1, France)

Web: www.denorms.eu
E-mail: denorms@univ-lemans.fr
Twitter: @DENORMS_CA15125



cost EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

COST is supported by the EU Framework Programme Horizon 2020

DENORMS

COST (European Cooperation in Science and Technology) is a pan-European intergovernmental framework. Its mission is to enable break-through scientific and technological developments leading to new concepts and products and thereby contribute to strengthening Europe's research and innovation capacities. www.cost.eu