CONSTRUCTIVE METHODS IN THE THEORY OF COMPOSITE AND POROUS MEDIA - a workshop for industrial mathematicians and engineers.

Organizers:

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Aims: The topic concerns application of mathematical methods to study composite and porous media. In particular, it includes

- Effective properties of composites
- Homogenization theory
- Electromagnetic and optical properties of metamaterials
- Transport in random media
- Nanocomposites
- Cloaking

The theoretical methods applied in this field are usually based on complex analysis, boundary value problems, partial differential equations, functional equations etc. This session will be also interesting for engineers and designers using mathematical models and computer simulations. It is plan to organize a workshop within the session concerning mathematical models and applied problems presented by engineers.