



**11th International Congress
on Artificial Materials for Novel Wave Phenomena
Metamaterials 2017
Marseille, France, 27 August – 2 September 2017**

The *Eleventh International Congress on Artificial Materials for Novel Wave Phenomena – Metamaterials 2017*, will comprise a **4-day Conference (28–31 August)**, and a **2-day Doctoral School (1–2 September)**. Organized by the *METAMORPHOSE VI AISBL* (www.metamorphose-vi.org) and hosted by the *Institut Fresnel of Marseille*, this Congress follows the success of *Metamaterials 2007-2016* and continues the traditions of the highly successful series of *International Conferences on Complex Media and Metamaterials (Bianisotropics)* and *Rome International Workshops on Metamaterials and Special Materials for Electromagnetic Applications and Telecommunications*. The Congress will provide a unique topical forum to share the latest results of the metamaterials research in Europe and worldwide and bring together the engineering, physics, applied mathematics and material science communities working on artificial materials and their applications from microwaves to optical frequencies, as well as in acoustics, mechanics, hydrodynamics and thermodynamics.

Paper Submission

Papers should be 2-3 pages long and contain an abstract, a brief conclusion, and a main body where technical content and novelty of the work are clearly presented. Papers should be submitted as camera-ready PDF files to the website:

<http://congress2017.metamorphose-vi.org>

Authors are requested to use the template provided on the Congress website when preparing their submission. Authors of accepted and presented papers will be given the option of publishing their work in IEEE Xplore subject to the manuscript compliance with the format and copyright requirements.

Topics

- Physics of complex electromagnetic materials
- Analytical and numerical modelling of metamaterials
- Homogenization of metamaterials and effective medium models
- Metasurfaces
- Carbon nanotubes and graphene in metamaterials
- Nonlinear, tunable and reconfigurable metamaterials
- Active and absorption-free metamaterials
- Chiral and bianisotropic composites
- Metamaterials with extreme parameters
- Quantum metamaterials
- Superconducting metamaterials
- Nonreciprocal and topological metamaterials
- Plasmonics
- Extraordinary transmission
- Photonic crystals and EBG structures.
- Antenna and absorber applications of metamaterials
- RF and microwave metamaterials: design, properties, applications
- Millimeter wave/THz metamaterials and applications
- Optical metamaterials and their applications
- Acoustic, mechanical and seismic metamaterials
- Metamaterials for nanoelectronics and nanophotonics
- Metamaterials for control of heat flow and radiation
- Nanocircuits and nanoantennas
- Metamaterials for quantum electronics
- Metamaterials for sensing
- Metamaterials in civil and maritime engineering
- Biological and biomedical applications of metamaterials
- Integrated nanophotonics and optoelectronics
- Super-resolution and near-field imaging: effects and devices
- Transformational electromagnetics, elastodynamics, hydrodynamics and thermodynamics
- Advances in cloaking and invisibility
- Experimental techniques and characterization of metamaterials
- Micro- and nanofabrication of metamaterials
- Metamaterials in education

Committees

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Filiberto Bilotti, Italy (*chair*)

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Doctoral School on Metamaterials

A course of the *European School on Metamaterials* operated by the *METAMORPHOSE VI* will be held in conjunction with the Congress (1-2 September 2017). The theme of the course is still under consideration and will be announced soon in the website. For more information visit the website: <http://school.metamorphose-vi.org/>

Contact

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Submission deadline

5 March 2017