



TRR 80 Seminar

Am Dienstag, den 10. Mai um 16:00 Uhr
spricht

Prof. Dr. Andrei Pimenov

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über das Thema

Metamaterials: new playground for modern physics

Metamaterials are artificial materials with a controlled composition and structure. This controlling allows the design of electromagnetic properties not existing in nature.

Typical examples are artificial magnetism up to the optical frequencies or negative refraction. Negative refraction reverses many laws of the classical optics and offers some interesting applications like overcoming of the resolution limit of optical devices.

In order to reach the regime of negative refraction the electric permittivity and magnetic permeability must be simultaneously negative. This theoretical prediction could a long time not be confirmed experimentally because of the complexity of the problem. Only recently could the negative refraction be realized in metamaterials and it has even been demonstrated that natural materials can be drawn to the negative refraction regime.

Gäste sind herzlich willkommen!

Der Vortrag findet im Seminarraum 288/Physik-Süd, Universität Augsburg statt.

Gastgeber: Dr. Joachim Deisenhofer

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