Laserové centrum HiLASE Vás zve na seminář

Modeling of propagation of bi-chromatic laser pulse in transparent solids: Preliminary concept

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A model of propagation of bi-chromatic laser pulses in transparent solids is proposed for the regimes of volumetric modification of materials. It is assumed that the pulse consists of two overlapping pulses with different wavelengths. The model is based on nonlinear Maxwell's equations and the hydrodynamic-type equations for free electron plasma generated by laser light. The problems of the description of multiphoton ionization, impact ionization, and the Kerr effect are discussed for double wavelength irradiation. Difficulties of mathematical description of monochromatic laser light interaction with transparent matter is also analyzed.

který se bude konat ve čtvrtek 2.7. 2015 od 14:30

v přednáškové místnosti laserového centra HiLASE

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