Fizikus Tanszékcsoport szemináriuma

Időpont: 2010. október 13-án, szerdán 13:00-14:00

Helyszín: Fröhlich tanterem.

Előadó: Miguel Angel Porras, Technic University of Madrid

LINEAR CONTROL OF THE PHASE OF FEMTOSECOND PULSES FOR PHASE-SENSITIVE LIGHT-MATTER INTERACTIONS.

Summary

With the development of high-power, phase-stabilized, femtosecond laser sources, an issue still pending is the stabilization of the phase of the femtosecond pulse against propagation effects beyond the laser cavity, and particularly along the focal volume where it interacts with matter. Gouy's phase shift about a focus causes deterioration and blurring of the phase-sensitivity of light-matter interactions such as high-harmonic and attosecond pulse generation. In this seminar we review the propagation and focusing properties of ultrashort pulsed Gaussian beams and describe some methods for the stabilization of the phase of focused femtosecond pulses that lead to an improvement of the efficiency these phase-sensitive light-matter interactions.

Minden érdeklődőt szeretettel várunk!