

Light from inside the Tunnel

Tuesday 27 February 2024 13:30 (30 minutes)

The strong-field induced ultrafast electron dynamics in dielectrics is explored via the associated low-order harmonic emission. Results from experimental and theory hint at the important role of the so far overlooked injection current as a major contribution for non-perturbative nonlinear- polarization and wave-mixing in dielectrics [1]. Possible routes towards all optical imaging of sub-cycle strong-field ionization are presented. [1] P. Jürgens, B. Liewehr, B. Kruse, C. Peltz, D. Engel, A. Husakou, T. Witting, M. Ivanov, M. J. J. Vrakking, T. Fennel and A. Mermillod-Blondin, Nat Phys. 16, 1035-1039 (2020)

Presenter: Prof. FENNEL, Thomas