Februar 21st, 2022 10:00 AM
QED & Materials seminar
Simon Vendelbo Bylling Jensen, Aarhus University

Title
"Nondipole formulation in Strong Field Physics"

Abstract
I will identify a nondipole strong-field approximation (SFA) Hamiltonian. Using classical simulations, I will show that this Hamiltonian is accurate and free from a defect present in the conventional 1/c nondipole expansion. I will allude to the Hamiltonian being attractive for numerical and analytical modelling of nondipole effects. I will briefly comment on implications of nondipole effects for laser-assisted scattering, strong-field ionization etc. At last I will show that similar ideas can be introduced in condensed matter systems.

Reference: https://doi.org/10.1103/PhysRevA.101.043408