# Ultrafast Nanoscopy by Deactivated High-Harmonic Generation from Solids

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Attosecond, atomic-scale movies remain a long-standing dream, with transformative applications from tracking resonances in metamaterials to observing phase transitions in strongly correlated materials. We propose a radical new route to this vision: HADES - Harmonic Deactivation Microscopy. By confining solid-state HHG far below the diffraction limit using an orbital-angular-momentum prepulse, we achieve selective deactivation of harmonic emission through a generalized quantum-optical framework we recently introduced and demonstrated. This mechanism interferes hidden photon pathways to enhance or suppress HHG with near-unity efficiency. HADES opens the door to all-optical, label-free super-resolution nanoscopy and control over nonlinear light–matter interactions.