## From extreme nonlinear optics to ultrafast atomic physics

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The interaction of atoms with intense laser radiation leads to the generation of highorder harmonics of the laser field; in the time domain to a train of pulses in the extreme ultraviolet range and with attosecond duration. The short pulse duration and broad bandwidth of attosecond pulses allow us to measure the phase and amplitude of ionizing electron wave packets, thus sheding light on the dynamics of photoionization.