Nonequilibrium quantum systems

The aim is to achieve control and manipulate quantum electronic materials, particularly superconductors and electronically ordered (CDW order) crystals with femtosecond lasers (incl. THz) or charge manipulation

• Control of superconducting order and topological excitations (vortices) and phase slip centers (PSCs) on the femtosecond timescale.

• Control of quantum states in charge-density wave systems