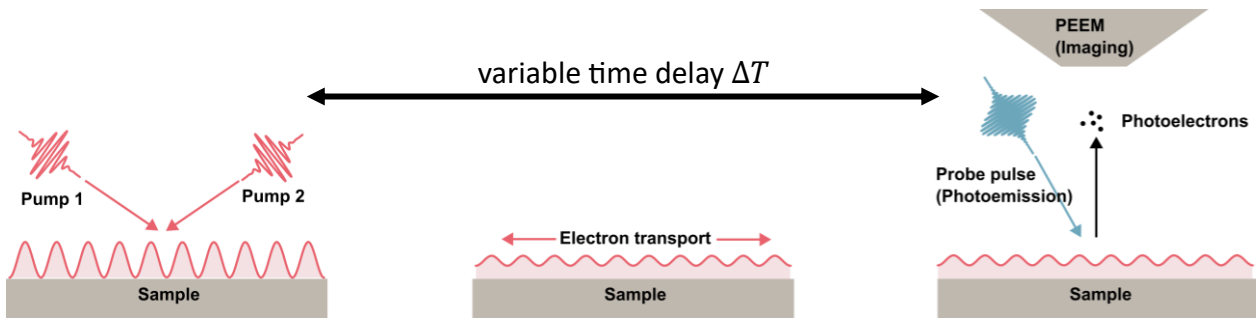
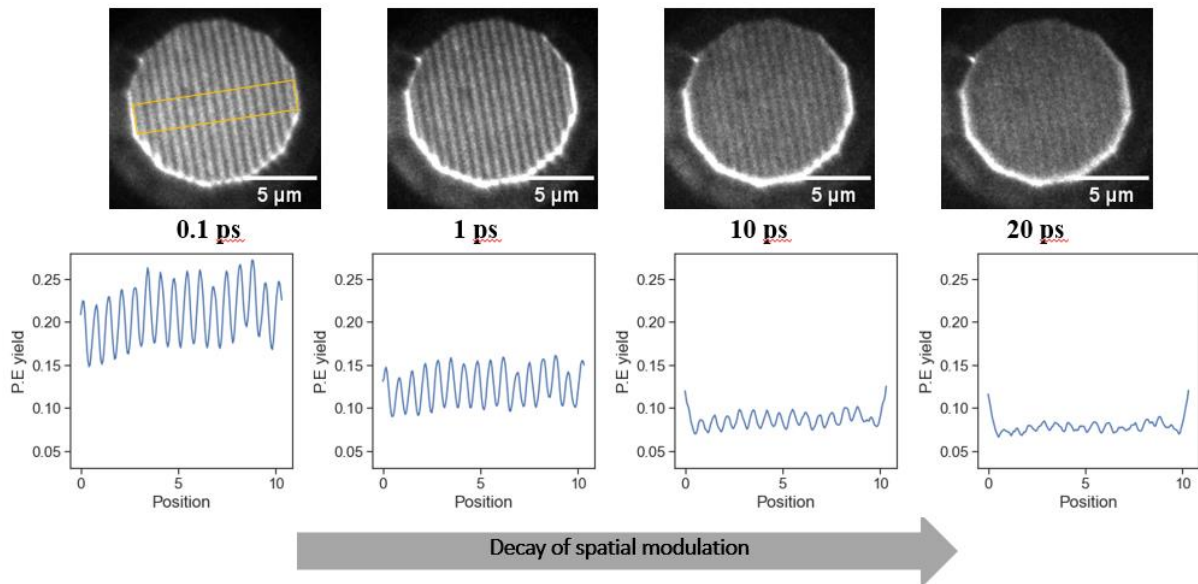


Supplementary material



Schematic with the principle of transient grating time-resolved PEEM



Upper panel: PEEM images of an InP platelet at different pump-probe delays (0.1 ps, 1 ps, 10 ps, and 20 ps). The intensity profile of the spatial modulation, averaged along the yellow rectangle is shown in the lower panel.