Time-Resolved Photoemission at BESSY II

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Photoemission of core levels is a sensitive tool to study the local chemical environment of atoms. In combination with the pump-probe technique one can study excited carrier dynamics and phase transitions. We have built an endstation for surface science experiments equipped with a commercially available, efficient angle-resolved time-of-flight spectrometer to enable trXPS experiments at BESSY II with a resolution of several 10 ps down to 100 fs when operating the slicing facility. First results of these experiments will be presented.