X-Ray Photon Correlation Spectroscopy

G. Grübel

DESY, Notke-Strasse 85, 22607 Hamburg, Germany **gerhard.gruebel@desy.de**

With its ultra-low emittance and dramatic increase in the degree of coherence ESRF-EBS will provide unprecedented experimental possibilities for coherence based applications. We will review the implications for correlation techniques such as X-ray Photon Correlation Spectroscopy (XPCS) and X-ray Cross-Correlation Analysis (XCCA) and discuss the impact of ESRF-EBS for our capabilities of characterizing the dynamical and structural properties of materials.