Dynamic K-edge Subtraction Fluoroscopy at a Compact Inverse-Compton Synchrotron X-ray Source

Stephanie Kulpe^{(1,2)*}, Martin Dierolf^(1,2), Benedikt Günther^(1,2), Johannes Brantl^(1,2), Madleen Busse^(1,2), Klaus Achterhold^(1,2), Bernhard Gleich⁽²⁾, Franz Pfeiffer^(1,2,3) and Daniela Pfeiffer⁽³⁾

- (1) Chair of Biomedical Physics, Department of Physics, Technical University of Munich, James-Franck-Straße 1, 85748 Garching, Germany
- (2) Munich School of BioEngineering, Technical University of Munich, Boltzmannstraße 11, 85748 Garching, Germany
- (3) Department of Diagnostic and Interventional Radiology, Munich School of Medicine and Klinikum rechts der Isar, Technical University of Munich, Ismaninger Straße 22, 81675 München, Germany

Supplementary Information

S1-S3: Supplementary videos 'S1_non-subtraction.mp4', 'S2_temporal_subtraction .mp4' and 'S3_KES.mp4' show the injection of the contrast agent over time for the non-subtraction, the temporal subtraction and the K-edge subtraction images of Figure 1. The images were shifted horizontally before subtraction to simulate the movement of the mouse during breathing. After subtraction the temporal subtraction and K-edge subtraction images were shifted back to ensure that the contrast agent stays in the same position which makes the evaluation of the images easier.