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**UNIVERSITÄT
BERN**

Seminar über Biomedizinische Photonik

Referent: Patrick Stähli, Institute of Applied Physics, University of Bern

Titel: Common mid-angle method applied to CUTE

Computed ultrasound tomography in echo-mode (CUTE) aims at complementing handheld diagnostic pulse-echo ultrasound by reconstructing the spatial distribution of speed of sound (SoS), based on measuring the changing local phase of beamformed echoes when changing the transmit beam steering angle.

In this seminar, I will give a short recap of the RF-data processing steps that are required for determining the echo phase shift. Further, I will introduce a novel RF-data processing technique, the common mid-angle approach applied to sliced samples, which links conceptually CUTE to conventional CT and potentially allows tomographic reconstructions. In addition, first simulation results using this approach will be shown.

Zeit: Mittwoch, 15.11.2017, 10:15 Uhr

Ort: **Hörsaal A97**, Gebäude exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz