Mathematical Imaging with Optical Coherence Tomography and Photoacoustics

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In this talk we discuss mathematical models used for describing Optical Coherence Tomography (OCT) and Photoacoustic Tomography (PAT) experiments. These two imaging modalities allow for visualization of biological specimens of a few millimeters.

For inversion we present some recent result on inversion in attenuating media and with variable sound speed.

This talk is based on joint work with W. Drexler and J. Schmid (Medical University Vienna), P. Elbau and L. Mindrinos (University Vienna) and C. Shi (University of Göttingen).

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