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Research at a Glance

Project:
Modeling of ultrasound transducers for optoacoustic imaging

Supervisors:
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**Project Description:**

Conventional optoacoustic reconstruction methods do not take into account, the geometrical shapes and electrical properties of a transducer and results in distorted images. The inaccuracies in image reconstruction are even more severe in cases of limited view array geometry and mismatch of speed of sound in coupling media. These cases are inherent to clinical optoacoustic imaging with handheld probes. The thesis is based on developing novel reconstruction methods incorporating the ultrasound transducer properties to achieve accurate reconstruction of optoacoustic images.