

## A paraxial approach for the inverse problem of vibroacoustic imaging in frequency domain

*Thursday, 6 July 2023 12:00 (25 minutes)*

Vibroacoustic imaging by means of ultrasound is an imaging method that was developed to achieve higher resolutions by sending in high frequency waves and making use of the difference frequency to avoid the drawbacks of scattering and stronger attenuation at high frequencies. We make use of a paraxial approach for the directive beams and arrive at a system of PDEs that involves space dependent parameters. Reconstructing these parameters yields a spatial image of the region of interest. In this talk, we will deal with the modeling and inverse problem for vibroacoustic imaging.

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