Contribution ID: 93

Sono-Photonic Interferometry

Gas-phase sono-photonics is an emerging field in photonics where light with potentially extreme parameters is controlled by interaction with intense ultrasound waves in gaseous media like ambient air. However, there are no common ways to quantitatively measure three dimensional sound fields, which is a requirement for future sono-photonic schemes.

This summer student project combines numerical research and initial practical implementation of a device that reconstructs 3D sound pressure fields using interferometric and machine learning techniques.

Group

FS-PRI

Project Category

A5. Lasers and optics

Special Qualifications

DESY Site

Hamburg

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