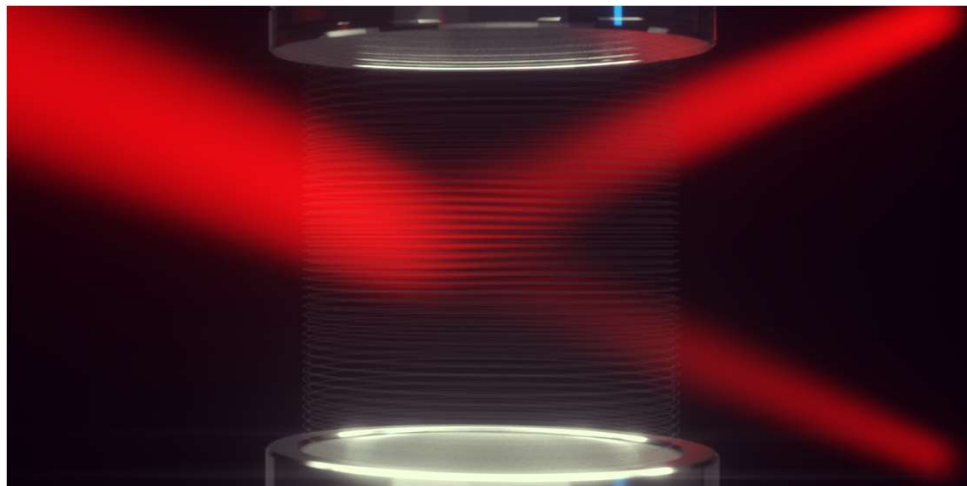


Master thesis project:

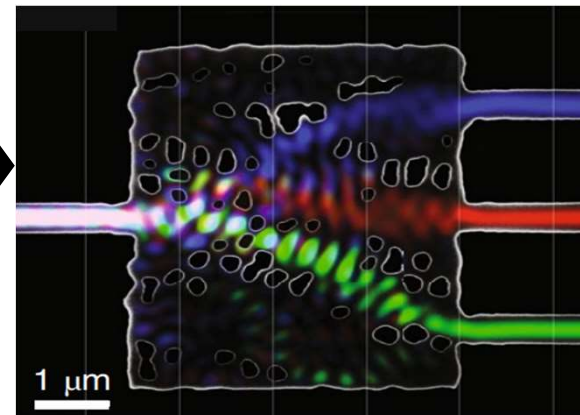
TOWARDS PROGRAMMABLE SONO-PHOTONICS.

At the group **FS-PRI**, the ultrafast photonics research and innovation group at DESY led by Christoph Heyl, we work on controlling light with ultrasound in gases.



Schrödel, Y., Hartmann, C., Zheng, J. *et al.* Acousto-optic modulation of gigawatt-scale laser pulses in ambient air. *Nat. Photon.* **18**, 54–59 (2024). <https://doi.org/10.1038/s41566-023-01304-y>

- *Objective:* Development of concepts for advanced ultrasound-based programmable optical elements, employing both optical and acoustical simulation methods (python-based)
- *Work environment:* Highly interdisciplinary work with partners across Germany in a young, motivated, new group. High likelihood of participation in scientific publications
- *Your skills:* Programming experience and familiarity with laser optics
- *Let's talk:* christoph.hey@desy.de and yannick.schroedel@desy.de



Molesky, S., *et al.* Inverse design in nanophotonics. *Nature Photon* **12**, 659–670 (2018). <https://doi.org/10.1038/s41566-018-0246-9>



PHOTONICS
RESEARCH — INNOVATION

