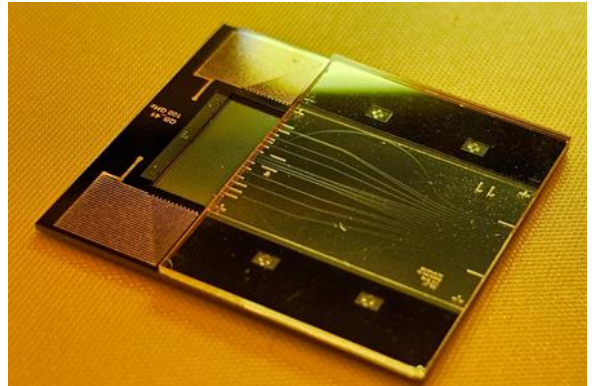


Internship / BSc. or MSc. Thesis

## Planning and designing of a photonic board for quantum computing applications

- Full-time / part-time / remote
- Duration: 3 – 6 months

vario-optics is a leading manufacturer of planar polymer waveguides. Based on its singlemode and multi-mode platforms, a variety of photonic systems can be produced.



Within this project, we investigate the challenges of controlling quantum computer hardware and potentially overcome them by using electro-optical photonic boards developed by vario-optics. Dedicated concept and design for a photonic board for trapped ion quantum processor control shall be developed and evaluated for its upscale potential.

### Your Tasks:

- Literature research on existing trapped ion quantum computing hardware and technology
- Identification of relevant performance parameters and requirements
- Development of a dedicated concept and design of a photonic board for trapped ion quantum processor control and evaluation for its upscale potential

### Your Profile:

- Background in optics/photonics or quantum physics
- Motivated to solve novel technical challenges
- Independent, careful and reliable
- Good communication skills with external partners

### Our Offer:

- Opportunity to gain experience in high-tech industry
- Hands-on experience with optical systems and technologies
- Working in a dynamic startup environment