



Fraunhofer Society is the largest organization for applied research in Europe. One of over 70 Fraunhofer institutes, the Fraunhofer Institute of Optronics, System Technologies and Image Exploitation (IOSB) in Ettlingen supports research in areas such as real-time image processing, pattern recognition, and performance optimization of electro-optical systems.

Research activities in the Adaptive Optics Group at Fraunhofer IOSB revolve around imaging through turbulence (especially along horizontal paths and strong turbulence) and free-space laser communications. We develop simulations, theoretical models, image processing software and adaptive optics systems. Imaging and laser propagation through strong turbulence has unique challenges, quite different from astronomical adaptive optics, and therefore, we rely on unconventional approaches to the problem. The group has participated in several international collaborations and experiments and has had projects funded by foreign agencies, in particular from the aerospace sector. More information about the AO Group at Fraunhofer IOSB can be found under: www.iosb.fraunhofer.de/?adaptive_optics

We offer a six-month M.Sc. project in the fields of adaptive optics or imaging through turbulence

The successful candidate would work on one of the following topics:

- Adaptive optics for laser beams propagating through strong atmospheric turbulence,
- Visible-light communications through water,
- Propagation of orbital angular momentum through atmospheric or underwater turbulence.

To apply please send your CV to:

Personalstelle, Gutleuthausstraße 1, 76275 Ettlingen, Germany

or per Email to: personal@iosb.fraunhofer.de with the reference „Masterarbeit adaptive Optik“