

## **Fraunhofer-Institut für Angewandte Optik und Feinmechanik IOF Jena - Optik und Feinmechanik**



The Fraunhofer Institute for Applied Optics and Precision Engineering IOF in Jena conducts applied research in the field of photonics and develops innovative optical systems to control light - from its generation and manipulation to its application. The services offered by the institute cover the entire photonic process chain ranging from opto-mechanical and opto-electronical system design to the manufacturing of customer-specific solutions and prototypes.

### **Student Assistant/ Intern/ Thesis Student - Multi-Mode Quantum Photonics (f/m/d)**

City: Jena; Starting date (earliest): At the earliest possible; Duration: befristet;  
Remuneration: nach Vereinbarung; Reference number: 79265

#### **Working field**

For the Department of »Photonic Quantum Systems« of the Fraunhofer Institute for Applied Optics and Precision Engineering (IOF), we are seeking a highly motivated research student to join the group »Multi-Mode Quantum Photonics«. Research in the group focuses on applied quantum technologies - from methods for generating and manipulating quantum states of light, to system-level applications in quantum communication and remote sensing. Our goal is to transfer quantum technologies from the laboratory to applications in fiber networks and long-distance satellite links.

#### **What you will do**

- Conduct research on entangled photon sources with chip-based microring resonators in combination with fiber-based components
- Implement methods for measuring frequency entanglement

#### **Requirements**

- Student in a Physics or Photonics master program (preferred) or in the final phase of a Bachelor's degree in related fields
- Programming skills in Python
- Lab-experience with optical components and devices preferred
- Excellent written and oral communication skills in English language

## What we offer

- Opportunity to work in challenging R&D projects
- Collegial, open-minded and friendly team
- Flexible working hours to balance studies and work experience
- Extensive professional support from scientific mentors
- Very good connection to public transportation

Depending on the employment, remuneration is based on the general company agreement on the employment of student staff or on intern remuneration. Working hours are agreed upon on an individual basis. The position is limited. We strive for long-term cooperation.

We value and promote the diversity of our employees' skills and therefore welcome all applications - regardless of age, gender, nationality, ethnic and social origin, religion, ideology, disability, sexual orientation and identity. Severely disabled persons are given preference in the event of equal suitability.

With its focus on developing key technologies that are vital for the future and enabling the commercial utilization of this work by business and industry, Fraunhofer plays a central role in the innovation process. As a pioneer and catalyst for groundbreaking developments and scientific excellence, Fraunhofer helps shape society now and in the future.

## Application

Interested? Apply online now. We look forward to getting to know you!

Fraunhofer Institute for Applied Optics and Precision Engineering IOF

[www.iof.fraunhofer.de](http://www.iof.fraunhofer.de)

Requisition Number: 79265

More information at <https://stellenticket.de/193478/TUBS/>

Offer visible until 07/05/25

