

## ***Optical ultrasound detection system for real-time photoacoustic projection imaging (rPAPI)***

### **Tasks:**

- Get involved with novel imaging techniques for biomedical research
- Work within an interdisciplinary project directly connected to biomedical application
- Development of a camera based optical ultrasound detection system for rPAPI
- Development of appropriate reconstruction methods applied on spatially-resolved data

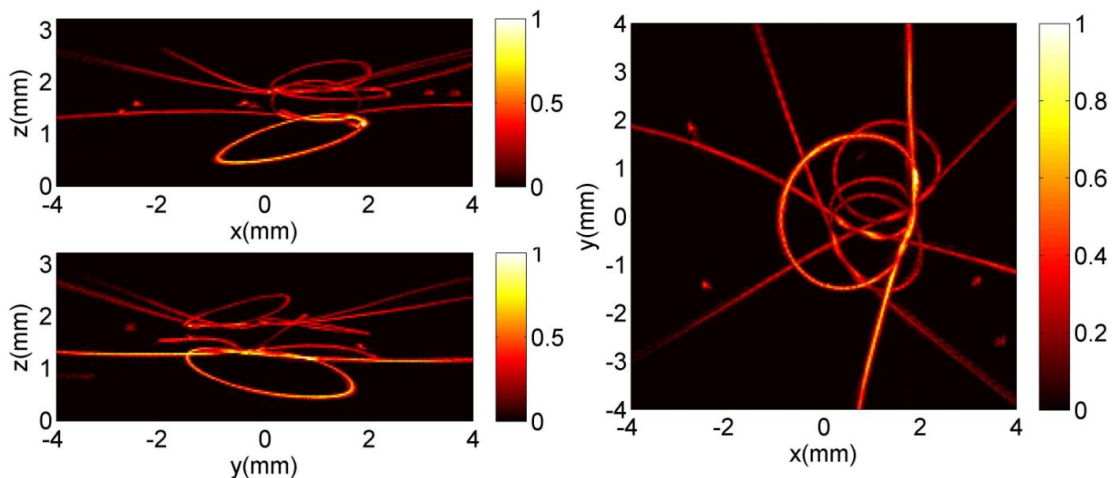
### **Requirements:**

- Education: experimental physics, technical engineering
- Hard skills: background in physics (optics, acoustic, signal processing)
- Basic programming skills: Matlab, LabView
- Soft skills: Initiative, structured working

### **Additional information:**

Period: 1 Year  
Salary: 400€ per month  
Supervisor: Mag. Dr. Robert Nuster, Institute of Physics, University of Graz  
Co-supervisor: Ao. Prof. Dr. Günther Paltauf, Institute of Physics, University of Graz

Please send your complete application documents by Email to: [ro.nuster@uni-graz.at](mailto:ro.nuster@uni-graz.at)



Photoacoustic MAP-images of a phantom sample containing black human hair loops and black PS-microspheres in a mixture of 2% agar and 5% intralipid in water.