# Erlangen Graduate School in Advanced Optical Technologies (SAOT) and Institute of Engineering Thermodynamics (LTT)

## 35<sup>th</sup> International SAOT Workshop:

## **Combustion Diagnostics**

23.9.24 - 24.9.24

Fraunhofer IISB, Schottkystraße 10, 91058 Erlangen

#### **Scope**

This workshop aims to provide a comprehensive understanding of **advanced optical techniques** and **methodologies** used in the field of combustion.

International experts present the latest diagnostic developments and applications essential for the analysis and optimization of different combustion process steps. A key focus will be on **laser-based diagnostics**, which have become indispensable in providing non-intrusive, highly accurate measurements of various combustion parameters. These cover methods such as **Laser-Induced Fluorescence** (LIF), **Raman and Rayleigh scattering**, **Coherent Anti-Stokes Raman scattering** (CARS), **Absorption Spectroscopy**, **Particle Image Velocimetry** (PIV) and even some **X-ray techniques**. These diagnostic principles are coupled/extended with dedicated developments such as **tomography**, **high-speed data acquisition**, **frequency combs** or **structured illumination** to enable quantitative results from extremely challenging environments such as reacting flows or flames.

This workshop will serve as a platform for knowledge exchange and favoring possible collaborations, with a format of lectures and extended discussions.



#### **Confirmed Speakers**

- Dr. Edouard Berrocal (Lund University, Sweden)
- Prof. Isaac Boxx (RWTH Aachen, Germany)
- Prof. Chloe Dedic (University of Virginia, USA)
- Prof. Pascale Desgroux (Université de Lille, France)
- Prof. Andreas Dreizler (Technische Universität Darmstadt, Germany)
- Dr. Samuel Grauer (Pennsylvania State University, USA)
- Prof. Gaetano Magnotti (KAUST, Saudi Arabia)
- Dr. Patrizia Minutolo (CNR-STEMS Naples, Italy)
- Prof. Greg Rieker (University of Colorado Boulder, USA)
- Dr. Alexey Sepman (RISE AB Pitea, Sweden)
- Prof. Lars Zigan (Universität der Bundeswehr München, Germany)

#### **Contact:**

If you need any further assistance, please do not hesitate to contact us via saot-administration@fau.de

### **Registration:**

All SAOT members - **PIs, Als, Ambassadors, mentors** and registered **doctoral candidates** are invited to attend free of charge.

If you are interested in participating in the workshop, please **register** before **23.8.24** using the online form:

https://www.saot.fau.de/events\_saot/upcoming-events/35th\_workshop/

