ETH zürich

D MAVT

Professor Thomas Rösgen

«Use your studies as an opportunity to create a foundation of expert understanding and inherent curiosity for your professional life.»

Experimental Fluid Dynamics
Institute of Fluid Dynamics

Our research focuses on flow image diagnostics and applied problems, such as in environmental and industrial flows, biomedical problems, aerospace applications and fundamental fluid physics. The lab offers various experimental facilities, including several water and wind tunnels and an optics laboratory. We offer practical training and thesis support, utilizing the research groups' infrastructure and expertise at both undergraduate and graduate level, and introduce students to many aspects of modern experimentation in fluid mechanics.

Focus

- Flow imaging techniques
- Applied flow problems
- Fluid physics

Tools and methods

4D particle image and tracking velocimetry, ultrasonic Doppler imaging, laser-based background oriented Schlieren, magnetorheological fluids, fluorescence depolarization and birefringence imaging, motion capture and optimal flow sensing, pattern recognition techniques

Further details online:
www.ifd.mavt.ethz.ch/research/group-roesgen