

FH MÜNSTER University of Applied Sciences

ЮТ

Institut für Optische Technologien

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Ort: Raum D 145 (Gebäudeteil D, Parkplatz P3) Stegerwaldstraße 39 48565 Steinfurt

Datum: Mittwoch, 20.11.2024

Uhrzeit: 17.00 Uhr c.t.

Das Institut für Optische Technologien lädt ein zum Kolloquiumsvortrag

Application of optically active coatings for surface heat flux and pressure measurements in high speed flows

Dr. Divek Surujhlal

Institute for Aerodynamics and Flow Technology | Spacecraft Department, German Aerospace Center, Göttingen

Diagnostics based on optically active coatings on surfaces for measurements in aerodynamics involves the development and application of temperaturesensitive paints (TSPs) and pressure-sensitive paints (PSPs).

TSPs allow for the measurement of surface heat flux fields, while PSPs are used to measure surface pressure fields. The advantages of these coated diagnostics include higher spatial resolution and greater accessibility compared to flush-mounted sensors.

Recent advancements in the application of coated diagnostics under highspeed aerodynamic flow conditions have addressed challenges such as fast response times and surface quality after coating application on wind tunnel test models.

This discussion will cover the development and use of these diagnostics in hypersonic flows.

Additionally, we will present developments of a new PSP and elaborate on open points that could serve as a basis for potential collaboration.

Einladender: Prof. Dr. Thomas Jüstel

