Eidgenössische Technische Hochschule Zürich
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Institut für Energietechnik: Prof. R.S. Abhari (LEC), Prof. K. Boulouchos (LAV)
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Prof. H.-M. Prasser (LKE), Prof. A. Steinfeld (PRE)
Institut für Fluiddynamik: Prof. P. Jenny, Prof. T. Rösgen
Computational Science & Engineering Laboratory: Prof. P. Koumoutsakos

24/02/2017

E I N L A D U N G

zu einem Vortrag im Rahmen des

Kolloquiums Thermo- und Fluiddynamik

Datum: **Mittwoch, 8. März 2017**

Zeit: **16:15 Uhr**

Ort: Maschinenlaboratorium ETH Zürich
Hörsaal ML H 44

Referent: **Prof. Masanori OTA**
Chiba University, Japan

Titel: **Reconstruction of Density in Compressible Flow**

The research activities in Chiba University relating to three-dimensional density measurement of compressible flow will be introduced. The first topic is the three-dimensional density measurement of the unsteady flow field induced by the discharging shock wave from a nozzle installed in a shock tube. The Laser Interferometric Computed Tomography (LICT) technique employing a Mach-Zehnder interferometer and a pulsed nitrogen laser has been developed to realize the reconstruction of density in high-speed and unsteady flow. The second topic is the reconstruction of density in a supersonic wind tunnel. The Colored-Grid Background Oriented Schlieren (CGBOS) technique using a colored grid pattern has been developed recently and is applied to the quantitative density measurement in supersonic wind tunnels. In this presentation, the procedure of the technique and some measurement results will be introduced in detail.

Host: Prof. T. Rösgen

Gäste sind willkommen!