



**Lecture on the occasion of the
4th Open Workshop on Advanced Aero propulsion Technologies
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Development and Application of Measuring Technique for Turbomachinery

The lecture will give an overview of experimental investigations on jet engine topics of the Institute of Jet Propulsion and Turbomachinery at RWTH Aachen University.

An introduction to the institute provides some insight in the in-house test facilities and the recent research activities on these rigs. This will be a representative example of all kinds of wind tunnel, compressor and turbine experiments. Also the regarding measuring techniques and instrumentation will be shown.

The second part is dedicated to the development and manufacturing of new probes based on AM. It will focus on the necessary considerations for the layout and the issues to be solved for setting up a reliable strategy for the probe manufacturing.

In the third part some results of experimental investigations at a centrifugal jet engine compressor stage at the institute will be shown. Finally the outcome of collaboration with Lufthansa German Airlines will shed some light on the improvement of compressor blade re-contouring processes.