



Workshop Program
PIV/ PTV-based pressure determination, PIV/ PTV pressure
challenge and Uncertainty quantification
Munich, June 2nd 2016

9:00 –9:05 **Opening remarks**

Christian J. Kähler (Universität der Bundeswehr Munich)

9:05 –9:30 **Introduction to NIOPLEX**

Bas van Oudheisen (Delft University of Technology)

9:30 –10:00 **Mean pressure and pressure fluctuations from 2C PIV snapshots**

Roeland de Kat, Jacques Van der Kindere and Angeliki Laskari (University of Southampton)

10:00 –10:30 **Adjoint-Based Data Assimilation in Compressible Flow**

Mathias Lemke and Jörn Sesterhenn (Technical University Berlin)

10:30 –11:00 **Coffee break**

11:00 –11:30 **Material acceleration determination for high speed flows by means of Shake-The-Box multi-pulse particle tracking**

Matteo Novara, Daniel Schanz, Sebastian Gesemann and Andreas Schröder (German Aerospace Center (DLR), Göttingen)

11:30 –12:30 **Comparative assessment of PIV-based pressure evaluation techniques applied to a transonic base flow**

Paul Blinde¹, Dirk Michaelis², Bas van Oudheusden¹, Pierre-Elie Weiss³, Roeland de Kat⁴, Angeliki Laskari⁴, Young Jin Jeon⁵, Laurent David⁵, Daniel Schanz⁶, Florian Huhn⁶, Sebastian Gesemann⁶, Matteo Novara⁶, Cameron McPhaden⁷, Nathan Neeteson⁷, David Rival⁷, Jan FG Schneiders¹, Ferry Schrijer¹

1: Delft University of Technology, 2: LaVision GmbH, 3: ONERA, 4: University of Southampton, 5CNRS –Université de Poitiers –ISAE-ENSMA, 6: German Aerospace Center (DLR), Göttingen, 7: Queen's University, Kingston, Canada

- 12:30 –13:00** **Discussion**
- 13:00 –14:00** **Lunch**
- 14:00 –14:30** **Estimation of velocity gradients from planar PIV measurements**
Sven Scharnowski and Christian J. Kähler (Universität der Bundeswehr Munich)
- 14:30 –15:00** **Near-wall 3D flow measurement approaches**
Thomas Fuchs, Rainer Hain, Christian J. Kähler (Universität der Bundeswehr Munich)
- 15:00 –15:30** **Component and engine testing at MTU Aero Engines AG**
Jürgen Gründmayer, Martin Stadlbauer (MTU Aero Engines AG)
- 15:30 –16:00** **PIV measurements from an automotive perspective**
Hubert Aumiller, Andrea Nati (BMW AG)
- 16:00 –17:00** **Final discussion and future aspects**