



**AFDAR Workshop
on TOMO-PIV and TR-PIV**

Delft – The Netherlands - June 30 2013



Program of the workshop

The AFDAR Workshop on TomoPIV and TR-PIV will be held at Delft University (The Netherlands), on the 30th of June 2013. The 10th *International Symposium on Particle Image Velocimetry* will take place the week after (1st to 3th July) at the same place.

The aim of the Workshop is to present

- the main results of the AFDAR European project which is dedicated to the development and the improvement of Advanced Flow Diagnostics for Aeronautical Research.
- recent results from the international community on the Tomo PIV and the Time-Resolved PIV,
- the organization and the announcement of the forth International PIV Challenge which will be held during the next year by Pr C. Kähler.

This workshop is open for AFDAR partners and also the other scientists in order to share their recent results on the three-dimensional flow measurement techniques and/or the Time-Resolved PIV.

Each contribution will be 15' including questions. Each author will have to provide, after the workshop, the corresponding electronic file in *pdf* format. All the presentation will be distributed one month after the workshop to the participants.

Registration :

Late registration should be done by completing the registration form and the grid of topics of interest and sending them to the same address before the 22 of june.

Pr. Laurent DAVID
Institut Pprime, Bat H2, 11 Boulevard Marie et Pierre Curie,
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Email : Laurent.David@univ-poitiers.fr
Web page : <http://www.afdar.eu>

Accommodation :

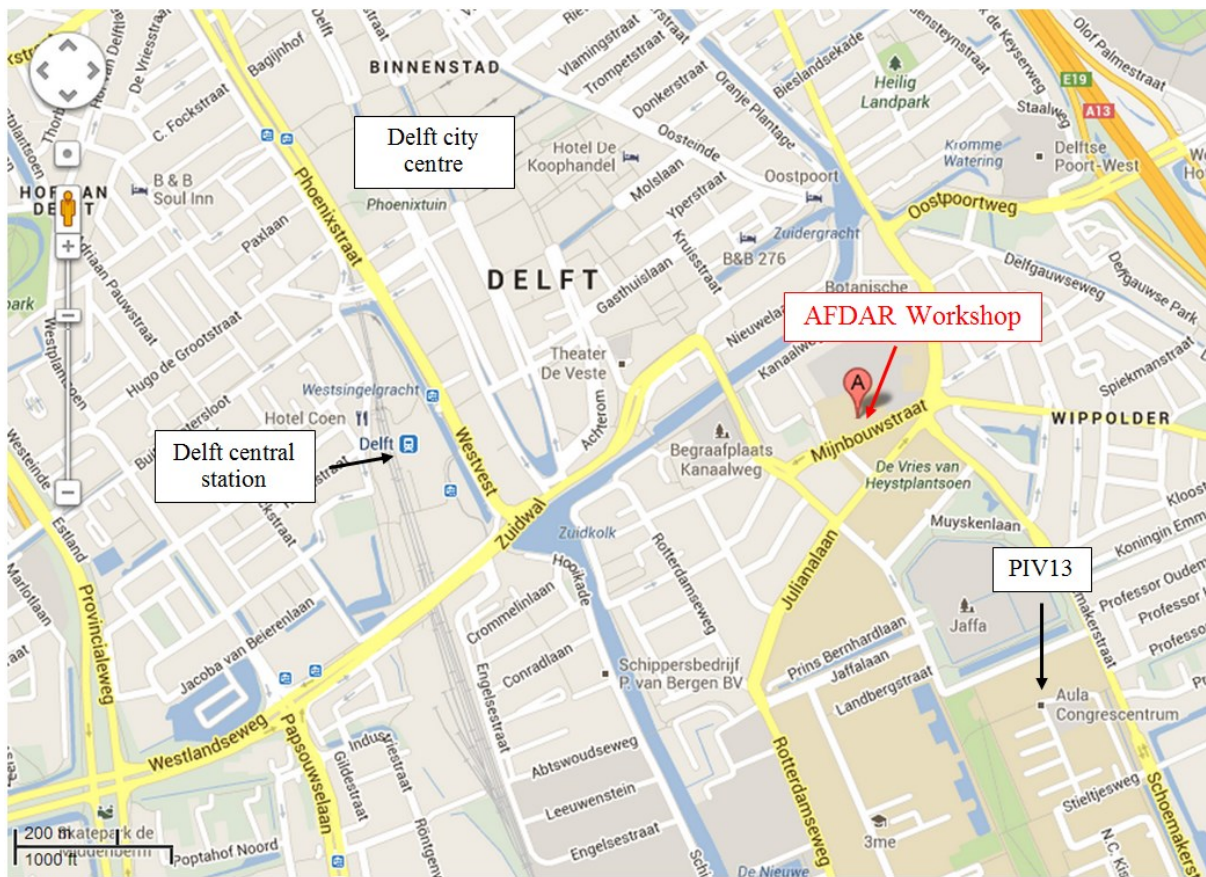
Accommodation is organised together with the Symposium so please look at the Symposium web page at <http://www.piv13.org/>

Local organization :

The local organizer is Pr. Fulvio Scarano and Andrea Sciacchitano (A.Sciacchitano@tudelft.nl).

Location

The event will be hosted at the faculty room of the Science Centre of TU Delft, which is located in Mijnbouwstraat 120, 2628 RX, Delft (NL).



The participation of the workshop is free of charge and the lunch will be offered.



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10h00 Welcome L. David, F. Scarano

10h15 Development of the TomoPIV in the Afdar Project.

L. David, L. Thomas

10h30 Time-resolved tomographic PIV measurements on the flow over periodic hills

D.Schanz, A. Schröder, C. Roloff, S. Scharnowski, D. Michaelis, M. Manhart

10h45 Recent advances in tomographic reconstruction for PIV

B. Leclaire, P. Cornic, A. Cheminet, F. Champagnat, G. Le Besnerais

11h00 Optimization of reconstruction parameters for an experiment of high repetition Tomo-PIV in a turbulent boundary layer. J.M. Foucaut, F.J.W.A. Martins, S. Coudert, M. Stanislas,

B. Lecordier, G. Godard, C. Gobin, L. Thomas, P. Braud, L. David, B. Tremblais

11H15 Advances in time-resolved image acquisition and motion analysis for tomographic PIV. K. Lynch, F. Scarano

11h30 Application of tomographic PIV to study vortex breakdown in a strongly swirling jet

A.V. Bilsky, V.M. Dulin, D.M. Markovich, M.P. Tokarev

11h45 Application of Three---Dimensional Particle Tracking Velocimetry in the Lab as well as at Large Scales in the Atmospheric Boundary Layer. D. E. Rival

12h00 Three-dimensional organization of the flow structure in an aero-engine lean premixing prevaporized burner. G. Ceglia, S. Discetti, A. Ianiro, D. Michaelis, T. Astarita and G. Cardone

12h30 Lunch

14h00 Proper Orthogonal Decomposition Analysis for Transitional Flow of the Carotid Artery Bifurcation Based on Stereoscopic PIV. S. Kefayati and T. L. Poepping

14h15 Combined time-resolved PIV and structure deformation measurements for aero-elastic investigations H. Ehlers, A. Schröder, R. Geisler, S. Gesemann, J. Lübker

14h30 Efficient storage and access of TOMO-PIV reconstructed intensity volumes and the impact on 3D PIV and PTV. C. Atkinson, N.A. Buchmann and J. Soria

14h45 Velocity dynamic range for TR-PIV Koji Okamoto

15h00 Comparison of Multi-frame PIV methods, Y. J. Jeon, L. Chatellier, L. David

15h15 Two multi-frame image correlation techniques for enhancing accuracy and dynamic range in time-resolved PIV. A. Sciacchitano, K. Lynch, F. Scarano

15h30 PIV challenge : C. Kähler

16h00 Discussions

16h30 End of the meeting



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Registration form

to be completed and sent back to the coordinator:

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Web page : <http://www.afdar.eu>

Deadline : June the 22th 2013

Name	
Organization	
Address	
Phone	
Fax	
Email	

AFDAR Partner

Other