Scope

Particle Image Velocimetry (PIV) has become an essential technique for flow measurement in both fundamental research and industrial applications. In recent years, the technique has been significantly expanded through hardware and processing innovations: fully time-resolved, volumetric velocity measurements are now possible. The range of applications has also broadened: PIV is routinely applied in aerodynamics, multiphase flows, microfluidics and in biological applications. The technique can be extended with complementary techniques (e.g. laser-induced fluorescence) to simultaneously measure scalars such as concentration and temperature.

This symposium, to be held in Santa Barbara from September 14-16, 2015, will bring together PIV users and developers from around the world. It is the eleventh installment in a biannual symposium series, following successful previous symposia such as Delft (2013), Kobe (2011) and Melbourne (2009). The main objective of the symposium is to exchange the latest research results in the development of PIV-related techniques and innovative applications.


Topics

All developments, investigations and applications related to Particle Image Velocimetry, including:

- Theory and Algorithms
- Particle Tracking Velocimetry
- Laser Induced Fluorescence (LIF)
- 3D techniques (e.g. tomographic, holographic)
- Imaging for Particle Sizing
- Pressure Measurement
- Scalar Transport and Mixing
- Multiphase and Turbulent Flows
- Biomedical Applications
- Micro-/Nano-fluidics
- Aerodynamics
- Combustion
- Data Post-processing

Important dates

Final date for abstracts  February 15, 2015
Notification of acceptance  May 1, 2015
Early registration deadline  June 15, 2015
Full manuscript  July 15, 2015
Conference  September 14-16, 2015

Keynote Speakers

Gerrit Elsinga (Netherlands): Coherent Structure Dynamics in Wall Turbulence
Morteza Gharib (USA): From PIV to Profilometry
Joseph Katz (USA): Integrating Tomographic PIV and Holographic Interferometry to Perform Simultaneous Multi-Scale Measurements of 3D Flow, Pressure and Wall Deformation in Wall Boundary Layers
K.C. Kim (Korea): Multiphysics PIV using Functional Particles
Experiments in Fluids
Experimental Methods and their Applications to Fluid Flow
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