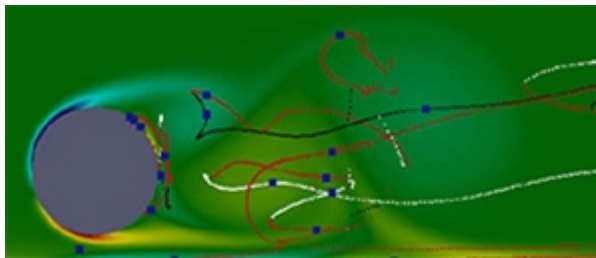


IUTAM



Call for papers

IUTAM symposium on

Dynamics and Topology of Vorticity and Vortices

June 13 – 16, 2017, Carry-le-Rouet, Marseille, France

Scope

Vortices occur on all scales in nature in both laminar and turbulent flows: in micro-scale flows in laboratory equipment; in arteries where they can be generated by a stenosis; in flows around wings of insects, birds and airplanes; in the flow of the atmosphere around islands, including a clearly observable and spectacular vortex structure in Jupiter's atmosphere behind the great red spot.

In the mathematical description of vortices, topology has played an important role. In an ideal fluid, the linkage structure of vortex lines remains invariant under time evolution, but may change if viscosity is present. In general, a topological approach to understand qualitative changes in the structure of fluid flows has proved to be very useful, whether it is applied to the physical space or to the abstract phase space which describes the dynamics.

The symposium will aim at linking researchers who work with qualitative methods such as topology to those who focus on numerical and experimental approaches. The symposium will cover all aspects and applications of vortex dynamics, including biological problems such as locomotion and physiology, industrial applications in wind turbine aerodynamics and other machinery as well as geophysical problems.

Confirmed Keynote Speakers

Charles Williamson (Cornell University, USA)
Carlo Barenghi (Newcastle University, UK)
Zensho Yoshida (University of Tokyo, Japan)

Scientific Committee

Morten Brøns, Technical University of Denmark, Denmark (Chairman)
Jens Nørkær Sørensen, Technical University of Denmark, Denmark
Eva Kanso, University of Southern California, USA
Kerry Hourigan, Monash University, Australia
Mark Thompson, Monash University, Australia
Thomas Lewke, CNRS Marseille, France
Yuji Hattori, Tohoku University, Japan
Keith Moffatt, Cambridge, UK (IUTAM representative)

Support

Danish Center for Applied Mathematics and Mechanics



Location

The Symposium will take place at the resort Club Vacancier Carry-le-Rouet, beautifully located at the Côte Bleue in Southern France, close to Marseille.



Important dates

February 13, 2017: Submission of a two-page extended abstract to mo-br@dtu.dk.

March 6, 2017: Notification of acceptance

April 18, 2017: Deadline for registration and hotel reservation

Practical information

Details about abstract format, registration, hotel reservation and the symposium program will appear at the conference website www.compute.dtu.dk/IUTAM2017.

Contact the organizers at mo-br@dtu.dk for further information.