

J.M.Burgerscentrum



Research School for Fluid Mechanics

2017

BURGERS SYMPOSIUM

Conference Centre 'De Werelt' in Lunteren

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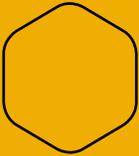
MAY

2017

<http://www.jmburgerscentrum.nl>

The Burgers Symposium is a two-days meeting of the JM Burgers Centre (JMBC), and is the annual meeting platform for all (junior and senior) scientists of the JMBC. The programme of the Symposium is attractive for all attendees, both junior and senior, both working on curiosity-driven and applied research projects, both numerically and theoretically oriented.

In 2017 we celebrate the



25th anniversary of the JM Burgerscentrum

which was formally founded in 1992. In a special session we will pay attention to this memorable fact, with a few senior speakers highlighting aspects of Prof Jan Burgers – who worked in Delft and later in Maryland (USA).

THE PROGRAMME INCLUDES :

- Burgers Lecture by Prof Christophe Clanet (Ecole Polytechnique, Palaiseau, F)
- Evening Lecture by Prof Vincent Icke (Sterrewacht Leiden, NL)
- A special session “25 years JMBC!”
- Parallel sessions with approx. 80 oral presentations by junior scientists (mostly PhD students and postdocs affiliated with the Burgers Centre)
- Session of flash pitches by PhD students in their first / second year
- The JMBC Art Gallery of Fluid Motion: exposition of stunning movies and pictures of fluid-dynamical phenomena
- Award session of prizes:
 - Charles Hoogendoorn Fluid Dynamics Award (KIVI)
 - Young Scientist Awards for the two best presentations by junior scientists
 - Gallery Award for the most attractive entry of the Art Gallery of Fluid Motion
- Ample possibilities to meet colleagues and friends, during the coffee / tea breaks, lunches, the joint dinner, and the ‘evening session’ on the first day.

All JMBC members are invited to join in this annual meeting !
In particular we hope to welcome many (if not all) of the JMBC PhD students and postdocs.

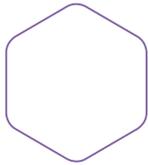
Registration for the Symposium and hotel reservations should preferably be done in a coordinated way per JMBC group. We have invited all the JMBC professors to coordinate the registrations, hotel reservations, junior-speaker suggestions for all the members of their group, in order to promote a coherent organisation.

Other interested persons (members of the Industrial Advisory Board, and other interested individuals, ...) should register individually via the JMBC website:

<http://www.jmburgerscentrum.nl>

We are looking forward to seeing you at the Burgers Symposium
in Lunteren on 30 & 31 May!

GertJan van Heijst
Ilse Hoekstein



BURGERS LECTURE

Prof Christophe Clanet - Sports fluid mechanics



The study of ball trajectories and the basic principles of rowing are classical examples of fluid mechanics applications in sports. But muscle contraction also involves fluid mechanics, as well as the friction on ice and snow. We will discuss a variety of applications of fluid mechanics in sports underlying the specificity of each sports and making the connection with its academic counterpart: classical aerodynamics (ball trajectories), visco-active matter (muscle), vorticity (rowing), waves (surfing), lubrication and capillarity (friction on ice and snow).

EVENING LECTURE



Prof Vincent Icke - Winds of change in astrophysics

Hydrodynamics was developed for planet Earth: winds in the atmosphere with a density of one kilogram per cubic metre, moving at one hundred metres per second, tops. Ocean waves with a fluid density of one kilogram per litre, not much faster than twice an atmospheric storm, even in a tsunami. But astrophysical flows are totally alien. Almost always hypersonic, reaching Mach numbers of one hundred or more. Often relativistic, up to ninety per cent of the speed of light. When two neutron stars collide, they behave almost like fluid drops, but each drop thirty kilometres across, with a density similar to that of an atomic nucleus, a quadrillion times that of ocean water on Earth. Astrophysics is a game of extremes – and great fun for players as well as spectators.



CHARLES HOOGENDOORN AWARD (KIVI)

Dr Joris Oosterhuis (former PhD student in the group Thermal Engineering, UT, now at Philips Innovation Sciences, Eindhoven)



This KIVI prize for the best PhD thesis in fluid dynamics defended in the Netherlands in the academic year 2015 – 2016 has been awarded to Dr Joris Oosterhuis for his PhD thesis: "Oscillatory flows in jet pumps: towards design guidelines for thermoacoustic applications", defended (cum laude) on 29 April 2016 (supervisor: Prof Theo van der Meer).