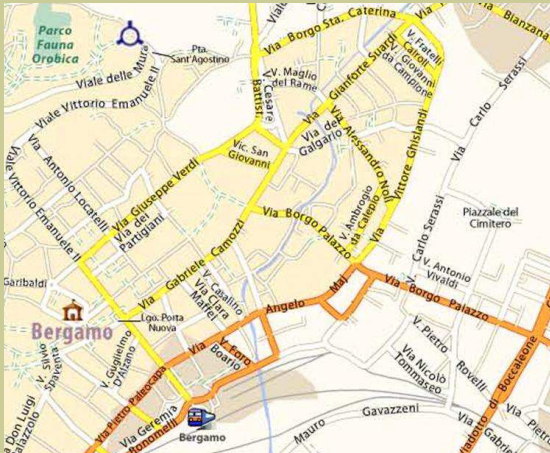


Conference venue



Sant'Agostino Conference Room
Via Fara, 24129 Bergamo



Ristorante Caffè della Funicolare
Via Porta Dipinta 1, 24129 Bergamo



UNIVERSITÀ DEGLI STUDI DI BERGAMO
Department of Engineering and Applied Sciences

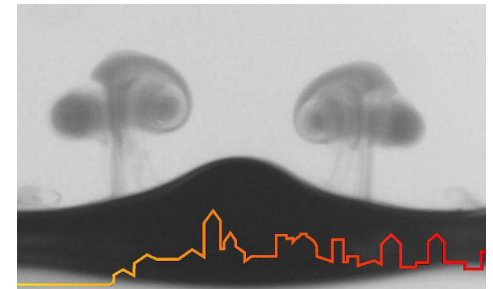
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UNIVERSITÀ DEGLI STUDI DI BERGAMO
Department of Engineering and Applied
Sciences

DIPSI Workshop 2015

Droplet Impact Phenomena & Spray Investigations

Twin vortex rings after the simultaneous impact of two drops onto a liquid pool



Bergamo, 29th May 2015

Sant'Agostino Conference Room

Workshop goals

This is the ninth edition of the workshop on droplet impact phenomena and spray investigations organised by the University of Bergamo. It represents an important opportunity to share the recent knowledge on droplets and sprays in a variety of research fields and industrial applications.

Preliminary program

28th May 2015

20:00 Dinner in the medieval Città Alta at Caffè Ristorante della Funicolare, via Porta Dipinta 1, 24129 Bergamo.

29th May 2015

8:30 Registration

9:10 Welcome speech

9:20 Section I: Drop impact

9:20 *Phenomena of drop impact on hot surfaces*, J. Breitenbach, I.V. Roisman, C. Tropea

9:45 *Progress in Two-Component Droplet Wall-Film Interactions*, A. Geppert, C. Meister, H. Gomaa, G. Lamanna, B. Weigand

10:10 *Effect of external electric field on spreading of a liquid droplet at low capillary number: conducting vs dielectric fluids*, G. Saccone, G. Del Seppia, C.A. Rossi and P. Di Marco

10:35 Coffee break and Poster session

Basic studies on grouping effects in droplet streams, N. Roth, B. Weigand, D. Katoshevski and B. Greenberg

Modelling evaporation of multi-component spherical droplet by solution of Maxwell-Stefan equations, G.E. Cossali and S. Tonini

Simulations of internal nozzle flow and spray formation in a pressure swirl atomiser for aircraft engines, S. Tonini, C. Galbiati, P. Conti and G.E. Cossali

11:10 Section II: Spray investigation

11:10 *Impact of film thickness on spray-film interactions for micrometer sized films and droplets*, K. Seel

11:35 *Time Scale Analysis, Experiments, and Simulations for a Monte Carlo Model of Spray Cooling*, J.M. Kuhlman

12:00 *Diesel spray combustion in an industrial burner*, B. Kniazev

12:25 *Spray tower for marine application*, A. Amoresano and G. Langella

12:50 Lunch break

14:10 Section III: Drop evaporation

14:10 *Simulation of droplet deformation, breakup and vaporisation using the full Navier Stokes equations*, G. Strotos, K. Papadopoulos and M. Gavaises

14:35 *Modelling of biodiesel and gasoline fuel droplet heating and evaporation*, S. Sazhin

15:00 *X-ray micro-CT investigation of deformed particle sublimation*, M. Santini, S. Fest-Santini, M. Lorenzi and G.E. Cossali

15:25 Section IV: Spray atomisation

15:25 *DNS investigation of conical swirled jet break-up*, C. Galbiati, S. Tonini, G.E. Cossali and B. Weigand

15:50 *Transition from spray atomisation and evaporation to miscible mixing at elevated pressures and temperatures*, C. Crua, J. Manin and L.M. Pickett

16:15 Coffee break

17:00 Workshop closure

Organisation information

To register to the event please send an e-mail with your data (name, affiliation, address, date of arrival) to Simona Tonini, simona.tonini@unibg.it.

Publication

A successive **publication** of the works presented during the workshop will be made. Anyone, who has contributed to the workshop with oral or poster presentation and he is interested to make a publication of his work, will be asked to send us a manuscript by **30th June 2015**. We will include it in a **CD-ROM with ISBN** which will be distributed to all the participants.

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