Conference venue

Sant’Agostino Conference Room
Via Fara, 24129 Bergamo

https://goo.gl/maps/8n36WxNGWeS2

Connections are guaranteed by taxi or bus line 1 (ticket for “zona 1– tariffa A”) starting from the train station.

Organisation committee

G. E. Cossali (Chairman)
S. Fest-Santini
M. Santini
S. Tonini

Prof. G. E. Cossali
gianpietro.cossali@unibg.it

+39 0352052309
+39 0352052077

Viale Marconi 5
24044 Dalmine (BG)
Italy

DIPSI Workshop 2023
Droplet Impact Phenomena & Spray Investigations

Bergamo, 16th June 2023

DROPIT Meets Industry Workshop
15th June 2023
**Workshop goals**

This is the fifteenth 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.

**DIPSi Workshop Program**

**15th June 2023, Thursday**

20:00 Dinner at Ristorante Circolino Città Alta, Vicolo Sant’Agata 19, 24129 Bergamo.

**16th June 2023, Friday**

08:45 Registration

09:00 Welcome speech

09:15 S1 Drop/wall interaction

9:15 R. Akbari, W. Yu, A. Bagni, R. Ruffo, M.-J. Thoraval and C. Antonini, Understanding water drop impact on porous meshes for effective fog harvesting

9:45 A. K. Geppert and B. Weigand, Ground spreading dynamics during single droplet impact onto a free-standing cubic surface element

10:15 Coffee break

10:45 S2 Drop/drop interaction

10:45 N. Janssen and U. Janoske, Experimental and numerical investigation of particle-droplet-substrate interaction

11:15 C. Chasos, Spray injection and development realizations and investigations of the effect of droplets coalescence and recirculation on ensemble-averaged predicted data

11:45 M. Marengo, Impact of compound drops on a flat solid surface

12:15 Lunch break

13:30 Poster session


D. Klötzl, M. Ibach, D. Weiskopf and B. Weigand, Relation between shear rate and structural parameter in non-Newtonian droplet oscillations via Jacobi sets and STL decomposition: a visual analysis

H.C. Konan and C. Rohde, An incompressible two-phase model with hyperbolic Navier-Stokes-Cahn-Hilliard approach

C. Marianowski, S. Fasoulas and M. Pfeiffer, Simulating liquid-vapor interfaces using non-equilibrium particle schemes

P. Molina Vogelsang, S. Schubert, B. Weigand and G. Lamanna, An approach to investigate the 3D height evolution in the crown crater during early crown formation with the general defocusing particle tracking (GDPT) method

P. Palmetshofer, T.A. Marz and B. Weigand, 360° contact angles of water droplets on micrometric ramps, pyramids and staggered cuboid surfaces at two different wettabilities

R. Saha and B. Weigand, Numerical simulation of droplet impact on structured surfaces

J. Stober, M. Santini and K. Schulte, Experimental observation of the collision of a crown with a thin wall film during early oblique droplet impact

R. Tietz, M. Pfeiffer and S. Fasoulas, Simulation of sub-micrometer droplet evaporation with a particle-based spherically-symmetric Enskog-Vlasov solver

Z. Zhang and S. Vanapalli, Dynamics of a nitrogen Leidenfrost droplet inside a water pool

14:15 S3 Phase change

14:15 S. Jöns, P. Mossier, C.-D. Munz and A. Beck, The use of local solutions to model phase transitions in the compressible flow regime

14:45 V. Kunberger, Phase change and interaction behaviour of supercooled Water droplets

15:15 S4 Measurement techniques

15:15 A. Purandare, Leidenfrost dynamics of sublimating solid carbon dioxide disc elucidated using optical coherence tomography


16:15 Coffee break

16:30 Workshop closure