

**Tuesday 15th of May and Wednesday 16th of May 2018, 9:00 am
Engineering Campus (Room B102)**

Seminars within the frame-work the
International Research Training Group on the topics of
Droplet Interaction Technologies (GRK 2160, **DRÖPIT**),
in partnership with University of Stuttgart and University of Trento,
funded by Deutsche Forschungsgemeinschaft (DFG).

Analysis of Droplet Dynamic Processes

by

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Abstract:

The topic of these lectures is the description of methods to study basic droplet dynamic processes. These methods are of analytical, numerical, and mainly experimental nature. The key point is to show that all methods together are necessary to understand and describe such a complex process. To this end, different examples of droplet dynamic processes will be used.

After some fundamentals, concerning basic concepts as surface tension, droplet generation, and droplet oscillations, different examples covering important processes are considered:

1. Phase change processes
2. Interaction with flow fields
3. Interaction with droplets
4. Interaction with surfaces

This will give a starting point for further detailed studies of the literature concerning droplets dynamic processes.



Picture of a monodisperse droplet stream moving from top to bottom. The droplet stream moves in an airflow coming from the left hand side. This results in an acceleration of the droplets. The accelerating forces on the droplets lead to disintegration showing a so-called bag break-up.

The seminars are open to all and particularly dedicated to PhD students of ISA and TIM doctoral programmes.

For more information, please contact Prof. G.E. Cossali, cossali@unibg.it