

Second Workshop on Compressible Multiphase Flows Derivation, closure laws, thermodynamics

During the Workshop on Compressible Multiphase Flows which held in May 2018, many interesting questions have been raised and the organizers decided to continue and open the discussion by proposing a second workshop on the same subject.

The second Workshop on Compressible Multiphase Flows has been staged in Strasbourg (France), in May 2019, 27-29th. The goal was to address the modelling of compressible multiphase flows, gathering specialists of this subject, which may come from math departments of universities but also from the industry.

The participants have shared modelling methods, difficulties, (rigorous or more phenomenological) analysis, allowing the description of multiphase flows with exchanges (mass transfer, energy exchange. . .) and apparition of shock waves. The main topics have been:

- The Physics of multiphase flows with mass transfer and high energy exchanges;
- The derivation and analysis of PDE models for compressible multiphase flows;
- The construction of coherent thermodynamical laws.

Note that one-velocity and multi-velocity models have been considered, while numerical aspects were disregarded in order to focus on fruitful discussions on the modelling issues.

The details of the workshop, such as the list of speakers and the title of their talks, can be found here:

<https://indico.math.cnrs.fr/event/4674/>

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