




4th European Conference on Non-Equilibrium Gas Flows 2023

29 – 31 March 2023, Eindhoven, the Netherlands

Scope

Non-equilibrium gas flows are of great importance and touch a variety of industrial fields. In such flows various non-equilibrium transport phenomena appear, which cannot be tackled by the typical Navier-Stokes approach. Under these rarefied conditions the roles played by the interactions between the gas and the solid device surface as well as in between the gas molecules become essential.

Topics

The conference topics are:

- Rarefied gas flows and heat transfer
- Non-equilibrium transport phenomena, kinetic theory and modeling
- Micro and nano gas flows and heat transfer
- Aerothermodynamics of high speed flows
- Gas-surface interaction
- Gas separation and mixing
- Evaporation, condensation, adsorption, deposition
- Two-phase microflows
- Sensors, actuators, pumps, heat exchangers and other devices involving non-equilibrium gas conditions
- Processes, equipment and systems in non-equilibrium gas conditions
- Gaseous microfluidics and fluidic microsystems involving gases

In each of these fields, new developments will be presented, concerning:

- Modelling and simulation tools
- Materials and manufacturing techniques
- Experimental techniques and measurements

Submission Dates

- 1 October 2022: abstract submission
- 15 December 2022: notification of acceptance
- 1 February 2023: final abstract submission

Venue

The conference center is located on the campus of Eindhoven University of Technology and within walking distance of the city center with various hotels. Eindhoven has very good rail and road connections with Amsterdam (Schiphol), Belgium and Germany. It also has its own airport with connections to about 70 destinations (mainly Europe).

Chairmen

- Stéphane Colin (University of Toulouse)
- Arjan Frijns (Eindhoven University of Technology)
- Dimitris Valougeorgis (University of Thessaly)

More information

<https://negf23.sciencesconf.org/>