

Short Course at European Vacuum Conference

22-23 November, 2021

Gas Flows under Vacuum conditions: from theory to applications

Each lecture is 1h30 and coffee break 30min

Monday 22 November

- 09:30 am to 01:00 pm
Fundamentals of kinetic theory (FS)
Coffee break
Simulations of gas flows under vacuum conditions (overview) + DVM (IG)
- 01:00 pm to 02:00 pm
Lunch
- 02:00 pm to 05:30 pm
Basis of DSMC method and examples of its applications (FS)
Coffee break
Collisionless Flows & TPMC (RK)

Tuesday 23 November

- 09:00 am to 12:30 am
Gas-surface interaction on impermeable surface (FS)
Interphase conditions with evaporation and condensation (IG)
Coffee break
Practical applications: TPMC realization with Molflow+ code (RK)
- 12:30 am to 02:00 pm
Lunch
- 02:00 pm to 05:30 pm
Practical applications: Gas dynamics calculations for a design of vacuum system (OM)
Coffee break
Practical applications: Vacuum gas dynamics for particle accelerators (OM)
- 05:30 pm to 06:00 pm
Discussion

Lecturers:

Felix Sharipov (FS)
Irina Gaur (IG)
Roberto Kersevan (RK)
Oleg Malyshev (OM)