

Invited Speakers of RGD32 (As of 18th Jan 2022)

Plenary Lecture

Tai-Ping Liu Academia Sinica, and Stanford University, USA (Harold Grad Lecture)

[Solving Boltzmann equation, Green's function approach](#)

Wim Ubachs Vrije University, Netherlands (Lloyd Thomas Lecture)

[Light extinction, Rayleigh-Brillouin scattering and absorption in the Earth's atmosphere, and in dilute and dense gases](#)

Deborah Levin University of Illinois at Urbana Urbana-Champaign , USA (Graeme Bird Lecture)

[Exploring the physics of multiscale flows at the molecular level](#)

Byung-Chan Eu McGill University, Canada (GNU-ERC Lecture)

[Thermodynamically consistent generalized hydrodynamic theory of flows far removed from equilibrium](#)

Keynote Lecture

Murat Barisik Izmir Institute of Technology, Turkey

["Law of the nano-wall" in nano-channel gas flows](#)

Stephane Colin University of Toulouse, France

[Molecular tagging - an experimental technique for velocimetry and thermometry in internal rarefied gas flows](#)

Zoltan Donko Wigner Research Centre for Physics, Hungary

[Kinetic effects in charged particle transport, gas breakdown, and electrical discharges](#)

Clinton P. T. Groth University of Toronto, Canada

[Development, numerical solution, and application of maximum maximum-entropy-entropy-inspired moment closures for non non-equilibrium gaseous flows with shocks](#)

Yan Guo Brown University, USA

[Geometric correction in Knudsen layer expansion](#)

Seung Yeal Ha Seoul National University, South Korea

[A kinetic approach for collective dynamics](#)

Kentaro Hara Stanford University, USA

[Physics-based and data data-driven models of low low-temperature plasmas for aerospace applications](#)

Elena Kustova Saint Petersburg State University, Russia

[New challenges in modeling non-equilibrium carbon dioxide flows](#)

Chang Liu HKUST, Hong Kong SAR, China

[A brief review of the direct modeling method: scheme construction, numerical property, and applications](#)

Duncan Lockerby University of Warwick, UK

[Simulating low-speed rarefied flows around 3D particulate and droplets](#)

Raphael Marschall Southwest Research Institute, USA

[To be added](#)

Jason Rabinovitch Stevens Institute of Technology, USA

[A quick overview of NASA planetary exploration missions](#)

Thomas E. Schwartzentruer University of Minnesota, USA

[Simulating shock wave physics from quantum chemistry](#)

Takashi Tokumasu Tohoku University, Japan

[Molecular dynamics simulations for nanoscale mass transport phenomena in polymer electrolyte fuel cells](#)

Lei Wu Southern University of Science and Technology, China

[Efficient and accurate deterministic solver for the Boltzmann equation: the fast spectral method and general iterative scheme](#)

Yonghao Zhang University of Strathclyde, Glasgow, UK

[Effect of confinement on non-equilibrium flow of dense gases](#)