

MIGRATE 2nd International Workshop – Keynote Lecturers

Dr. Avshalom Manela (Technion, Israel)



Avshalom Manela received his BSc in Aerospace Engineering at the Technion, Israel, in 1999. He then continued to pursue his MSc (2002) and PhD (2006) at the same department, where he examined the effect of gas rarefaction on the hydrodynamic instability of gas flows. After completing his PhD, Dr. Manela accepted an Instructor position in the Department of Mathematics at MIT, where he conducted his post-doctoral studies. In 2010, Dr. Manela joined the Faculty of Aerospace Engineering at the Technion, where he now serves as an Assistant Professor. Dr. Manela's research interests combine topics in rarefied gas dynamics and aeroacoustics, and his work has been published in 25 journal papers.

Prof. Felix Sharipov (Federal University of Parana, Brazil)



Prof. Felix Sharipov studied at the Moscow University of Physics and Technology, Faculty of Aerophysics and Space Research. He obtained his Ph.D. at the Ural State Technical University. In 1988, he joined the Physics Faculty of the Ural State University where he set up his activity in rarefied gas dynamics. In 1992, he moved to the Federal University of Parana in Brazil where he built up a group on numerical modelling of gas flows in microscale. His research interests are numerical methods of rarefied gas dynamics applied to microfluidics, vacuum technology and aerothermodynamics. His group develops both probabilistic and deterministic approaches. The first one represents the Monte Carlo methods, while the second one is based on the kinetic Boltzmann equation.

Prof. Christian J. Kähler (Bundeswehr University Munich, Germany)



Christian J. Kähler received his Physics Diplom Degree from the Technical University Clausthal in 1997, his PhD in Physics from the Georg August University of Göttingen in 2004 and his Habilitation from the Technical University in Brunswick in 2008. Besides, Dr. Kähler was a research scientist at the University of Illinois at Urbana Champaign in 1996 (Prof. Adrian) and at Caltech in 1998 (Prof. Gharib). He became Professor for Fluid Dynamics and was appointed director of the Institute of Fluid Mechanics and Aerodynamics of the Bundeswehr University Munich in 2008. In 2012, he was offered an Einstein professorship for Aerodynamics at the Technical University Berlin (declined) and in 2017 the Technical University Darmstadt offered him to become head of the chair of Fluid Mechanics (declined). His research covers a broad range of topics spanning from the development of optical measurement techniques for microscopic, as well as macroscopic, flow diagnostics, to the investigation of microfluidics phenomenon and turbulence in subsonic, transonic, and supersonic air flows in large wind tunnels. He is an associate editor of Experiments in Fluids (Springer), an editorial advisory

board member of Flow, Turbulence and Combustion (Springer) and editorial board member of Theoretical & Applied Mechanics Letters (Elsevier), a Steering committee member and organizer of the International PIV Challenge (2001 Göttingen, 2003 Busan, 2005 Pasadena, 2014 Lisbon) and an organizer, co-organizer and advisory board member of various international conferences. Since 2012, Prof. Kähler is an elected member of the review board of the German Science Foundation (DFG) and an elected member of the German Association for Laser Anemometry (GALA e.V.) since 2015. He has given over 20 keynote and named lectures and more than 100 additional invited lectures. He has authored and co-authored over 100 archival publications and more than 200 conference papers. Currently he supervises 6 Postdocs and 16 PhD students.

See [YouTube](#) video [Diving with microparticles in acoustic fields](#)
<http://www.youtube.com/watch?v=F1VgkESM4o4>