

Dynamics of compressible Euler equations and complex flows Special Session B23

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The topic of this special session is the analysis of partial differential equations (PDE's) arising in physics, which are nonlinear hyperbolic or systems that combine hyperbolic with parabolic features. Such equations are ubiquitous in multiple domains of applied sciences, ranging from high-speed flows in fluids, to flows of complex systems, to plasma physics, and astrophysics. The aim is to bring together people that work on compressible Euler equations (and related subjects) with specialists who work on flows of complex and multiscale systems and to stimulate an exchange between these subjects. We will focus on theory, numerics, as well as modeling and applications, and their interplay. We hope to explore new directions, and to stimulate new collaborations.