Special Issue

High Speed Flows

Message from the Guest Editor

High-speed gas flows occur during the movement of aircrafts, rockets, descent vehicles, as well as in combustion chambers, nozzles and in many other technological applications. High-speed flows are characterized by a complex shock-vortex structure and the presence of large gradients of gas parameters due to the emerging shock waves, areas of shear deformations and the possible development of gasdynamic instabilities. This Special Issue of Fluids is focused on the recent advances in the numerical and experimental modeling of high-speed flows. The planned topics include (but are not limited to) the following areas: supersonic/hypersonic flows, flow control, shock waves, turbulence, vortices and vortex structures, boundary layers, heat fluxes, gas-dynamic instabilities.

Guest Editor

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Deadline for manuscript submissions

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