## Unified methods for computing compressible and incompressible flows on structured and unstructured staggered grids

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An important example of a hyperbolic system of conservation laws are the governing equations of inviscid gasdynamics (Euler equations). When the Mach number M tends to zero one of the characteristic speeds tends to infinity and standard numerical schemes break down. We will discuss unified methods for compressible

and incompressible flow that have accuracy and efficiency uniform in M. Furthermore, we allow general (nonconvex) equations of state. For ease of handling of geometrically complicated domains, unstructured grids are attractive. An unstructured staggered Mach-uniform scheme is discussed.