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| Nota di contenuto | CONTENTS; EDITORIAL ADVISORY BOARD; Abstracts and keywords; Editorial; Simulation of transonic flutter and active shockwave control; Numerical study of active shock control for transonic aerodynamics; Dynamic modeling in large-eddy simulation of turbulent channel flow Investigation of two-dimensional versus three-dimensional test filtering; The role of endothermic gasification in propellant ignition; Rarefied, superorbital flows in an expansion tube; Numerical simulation of inductively coupled plasma flows under chemical non-equilibrium; Discretization of the magnetic field in MPD thrusters |
| Sommario/riassunto | Transonic flutter and active flap control, in two dimensions, are simulated by coupling independent structural dynamic and inviscid aerodynamic models, in the time domain. A flight control system, to actively control the trailing edge flap motion, has also been incorporated and, since this requires perfect synchronisation of fluid, structure and control signal, the "strong" coupling approach is adopted. The computational method developed is used to perform transonic aeroelastic and aeroservoelastic calculations in the time domain, and used to compute stability (flutter) boundaries of 2D wing |

