Record Nr. UNINA9910257431403321 Ninth International Conference on Numerical Methods in Fluid **Titolo** Dynamics [[electronic resource] /] / edited by Soubbaramayer, J. P. Boujot Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-39144-4 Edizione [1st ed. 1985.] 1 online resource (X, 615 p. 377 illus.) Descrizione fisica Lecture Notes in Physics, , 0075-8450;; 218 Collana 531 Disciplina Soggetti Continuum physics **Fluids Physics** Classical and Continuum Physics Fluid- and Aerodynamics Mathematical Methods in Physics Numerical and Computational Physics, Simulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Remarks on approximation schemes -- Topics in the numerical simulation of high temperature flows -- Compact explicit finitedifference approximations to the Navier-Stokes equations -- Timesplitting and the finite element method -- Spectral methods for compressible plow problems -- Global relaxation procedures for a reduced form of the Navier-Stokes equations -- Modelisation numerique d'ecoulements turbulents instationnaires en canalisation cylindrique -- On the use of rational Runge-Kutta methods in Euler steady-state computations -- Probating a finite difference fractional time step, Navier-Stokes code by large eddy simulation -- GRP — An analytic approach to high-resolution upwind schemes for compressible fluid flow -- An adaptive multigrid method for the euler equations --Direct simulations of spatially evolving compressible turbulence techniques and results -- Free decay of high reynolds number two

dimensional turbulence -- Finite element calculation of potential flow

around wings -- Finite element methods for solving the Navier-Stokes equations for compressible unsteady flows -- Numerical solutions of the Euler equations with separation by a finite element method --Chebyshev spectral and pseudospectral solutions of the Navier-Stokes equations -- Analysis of strongly interacting viscous-inviscid flows including separation -- An improved Euler method for computing steady transonic flows -- A semi-direct procedure using a local relaxation factor and its application to an internal flow problem --Viscous computation of a space shuttle flow field -- Numerical calculation of complex shock reflections in gases -- Boundary layer modelling in a numerical weather prediction model -- Modelling of two-dimensional bubbles in vertical tubes -- A time dependent free boundary governed by the Navier-Stokes equations -- A perturbative lambda formulation -- Numerical modeling of vortex merging in axisymmetric mixing layers -- A new modified semi-explicit difference scheme in aerodynamics -- Three-dimensional computations of nonisothermal wall bounded complex flows -- A multigrid technique for steady Euler equations based on flux-difference splitting -- Generation of fully adaptive and/or orthogonal grids -- Computation of compressible two-dimensional turbulence in non rotating and rotating flows -- Comparison of the full-potential and Euler formulations for computing transonic airfoil flows -- Numerical simulations of fuel droplet flows using a Lagrangian triangular mesh -- On boundary conditions for inner incompressible flows -- Fast three-dimensional flux-corrected transport code for highly resolved compressible flow calculations -- A numerical study of the two- and three-dimensional unsteady Navier-Stokes equations in velocity-vorticity variables using compact difference schemes -- Improvements in the accuracy and stability of algorithms for the small-disturbance and full-potential equations applied to transonic flows -- 3D industrial flows calculations by finite element method -- Transonic flows through cascades -- Twodimensional model for the two-phase flow simulation in a viking rocket engine combustion chamber -- A numerical solution to the motion of a lubricant squeezed between two rotating coaxial disks -- Numerical simulation of gas motion in piston engines -- Modelisation numerique dE la separation centribuge d'un melange -- Supersonic flow past circular cones at high angles of yaw, downstream of separation -- A two-grid method for fluid dynamic problems with disparate time scales -- Multiple-grid solution of the three-dimensional Edler and Navier-Stokes equations -- New higher-order upwind scheme for incompressible Navier-Stokes equations -- Solution of the parabolized Navier-Stokes equations for three-dimensional internal flows --Implicit solution of the 3-D compressible Navier-Stokes equations for internal flows -- Computation of three-dimensional vortex flows past wings using the EULER Equations and a multiple-grid scheme -- A spectral element method applied to unsteady flows at moderate Reynolds number -- The computation of three-dimensional transonic viscous flows with separation -- A numerical method of solution for the Kelvin-Neumann problem -- Numerical solution of unsteady transonic flows past thin profiles -- Potential application of artificial intelligence concepts to numerical aerodynamic simulation -- A solution procedure for three-dimensional incompressible Navier-Stokes equation and its application -- A multi-zonal-marching integral method for 3dboundary layer with viscous-inviscid interaction -- An implicit method for solving fluid dynamics equations -- L.E.A. Un code hydrodynamique multifluide bidimensionnel -- Spectral simulations of 2D compressible flows -- A multigrid factorization technique for the flux-split Euler equations -- Numerical study of the three-dimensional incompressible

flow between closed rotating cylinders -- An adaptive finite element method for high speed compressible flow -- Analysis of separated flow in a pipe orifice using unsteady Navier-Stokes equations -- The convective dynamo: A numerical experiment -- A second-order accurate flux splitting scheme in two-dimensional gasdynamics -- A comparison of finite difference and characteristic Galerkin methods for shock modelling -- Multigrid relaxation for the Euler equations -- A practical adaptive-grid method for complex fluid-flow problems --Orthogonal grid generation by boundary grid relaxation algorithms --A new LU factored method for the compressible Navier-Stokes equations -- Time-dependent non-uniform grids for parabolic equations -- Numerical simulation of dynamics of an autorotatating airfoil -- Transient multiple wave number convective instability in a 2dimensional enclosed rotating fluid -- Numerical computation of 3-D fire-induced flows and smoke coagulation -- Cyber 205 dense-mesh solutions to the Euler equations for flows around the M6 and Dillner wings -- Nonconforming 3D analogues of conforming triangular finite element methods in viscous flow -- On the non-uniqueness of the solution of the problem on flow field about a cone at incidence --Higher-order method of lines for the numerical simulation of turbulence -- A numerical study of the fluid dynamics in extractions columns -- Multigrid solution of the Navier-Stokes equations for the flow in a rapidly rotating cylinder -- Algorithms for direct numerical simulation of shear-periodic turbulence -- Steady and unsteady nonlinear flow treatment using the full potential equation -- Vortex method in three-dimensional flow -- Calculation of transonic potential flow past wing-tail-fuselage combinations using the multigrid technique -- Pulsed column: Transient flow of a polydispersed phase -- A flame approach to unsteady combustion phenomena with application to a flame interacting with a cold wall -- Numerical solution for entry flow in curved pipes of arbitrary curvature ratio -- Numerical simulation of boundary-layer transition -- Spectral methods for aerodynamic problems -- Time-dependent inverse solution of threedimensional, compressible, turbulent, integral boundary-layer equations in nonorthogonal curvilinear coordinates -- A threedimensional incompressible primitive variable Navier-Stokes procedure with no poisson solver -- Formation of taylor vortices in spherical Couette flow -- Numerical simulation of unsteady flowfields near bodies in nonuniform oncoming stream -- Flux vector splitting and Runge-Kutta methods for the Euler equations -- Fast solutions to the steady state compressible and incompressible fluid dynamic equations -- Influence matrix technique for the Navier-Stokes pressure boundary condition -- Simulation of transonic separated airfoil flow by finitedifference viscous-inviscid interaction -- Universal single level implicit algorithm for gasdynamics -- Renormalization group-based subgrid scale turbulence closures -- An iterative-method of integral relations scheme for wake flows -- Fourier-legendre spectral methods for incompressible channel flow -- Accurate solution of several complicated problems.