

1. Record Nr.	UNINA9910830931903321
Autore	Farahbakhsh Iman <1984->
Titolo	Krylov subspace methods with application in incompressible fluid flow solvers // Iman Farahbakhsh
Pubbl/distr/stampa	Hoboken, NJ : , : Wiley, , 2020
ISBN	1-119-61870-3 1-119-61869-X 1-119-61873-8
Descrizione fisica	1 online resource (257 pages)
Disciplina	512.9434
Soggetti	Sparse matrices Navier-Stokes equations - Numerical solutions Fluid dynamics - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Discretization of partial differential equations and formation of sparse matrices -- Theory of Krylov subspace methods -- Numerical analysis of Krylov subspace methods -- Solution of incompressible Navier-Stokes equations.
Sommario/riassunto	"This book is devoted to the implementation of the Krylov subspace methods for solving systems of equations with different types of matrices. The main purpose is providing a resource for student and researchers who want to exploit the nonstationary solvers like Krylov subspace methods in incompressible flow solvers. This book offers the standard main programs and subroutines and guides the reader to develop the Krylov subspace-based solvers for the solution of the set of equations arise from CFD problems. There are applicable main programs and subroutines in appendices, which supports the results that provided through the book. The content is layed out in such a way that prepares the reader to use Krylov subspace methods in incompressible flow solvers"--