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Descrizione fisica	1 online resource (IX, 193 p. 81 illus., 70 illus. in color.)
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Disciplina	515.15
Soggetti	Numerical analysis Computer mathematics Computer graphics Numerical Analysis Numeric Computing Computational Science and Engineering Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Preface -- Standard and NonStandard CAGD Tool for Isogeometric Analysis: a Tutorial -- Models for Isogeometric Analysis from CAD -- An Introduction to the Numerical Analysis of Isogeometric Methods -- Isogeometric Compatible Discretizations for Viscous Incompressible Flow.
Sommario/riassunto	Providing an introduction to isogeometric methods with a focus on their mathematical foundations, this book is composed of four chapters, each devoted to a topic of special interests for isogeometric methods and their theoretical understanding. It contains a tutorial on splines and generalizations that are used in CAD parametrizations, and gives an overview of geometric modeling techniques that can be used within the isogeometric approach, with a focus on non-tensor product splines. Finally, it presents the mathematical properties of isogeometric spaces and spline spaces for vector field approximations, and treats in detail an application of fundamental importance: the isogeometric

simulation of a viscous incompressible flow.

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