1.	Record Nr.	UNISA996466760803316
	Titolo	IsoGeometric Analysis: A New Paradigm in the Numerical Approximation of PDEs [[electronic resource]] : Cetraro, Italy 2012 / / edited by Annalisa Buffa, Giancarlo Sangalli
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
	ISBN	3-319-42309-6
	Edizione	[1st ed. 2016.]
	Descrizione fisica	1 online resource (IX, 193 p. 81 illus., 70 illus. in color.)
	Collana	C.I.M.E. Foundation Subseries ; ; 2161
	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
	Livello bibliografico	Monografia
	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