

1. Record Nr.	UNINA9910153614503321
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Titolo	Tractability of Multivariate Problems [[electronic resource] ] : Volume III: Standard Information for Operators // Erich Novak, Henryk Wozniakowski
Pubbl/distr/stampa	Zuerich, Switzerland, : European Mathematical Society Publishing House, 2012
ISBN	3-03719-616-5
Descrizione fisica	1 online resource (604 pages)
Collana	EMS Tracts in Mathematics (ETM) ; 18
Classificazione	65-xx
Soggetti	Numerical analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>This three-volume set is a comprehensive study of the tractability of multivariate problems. Volume I covers algorithms using linear information consisting of arbitrary continuous linear functionals. Volumes II and III are devoted to algorithms using standard information consisting of function values. Approximation of linear and selected nonlinear functionals is dealt with in volume II, and linear and selected nonlinear operators are studied in volume III. To a large extent, volume III can be read independently of volumes I and II. The most important example studied in volume III is the approximation of multivariate functions. It turns out that many other linear and some nonlinear problems are closely related to the approximation of multivariate functions. While the lower bounds obtained in volume I for the class of linear information also yield lower bounds for the standard class of function values, new techniques for upper bounds are presented in volume III. One of the main issues here is to verify when the power of standard information is nearly the same as the power of linear information. In particular, for the approximation problem defined over Hilbert spaces, the power of standard and linear information is the same in the randomized and average case (with Gaussian measures) settings, whereas in the worst case setting this is not true. The book is of interest to researchers working in computational mathematics,</p>

especially in approximation of high-dimensional problems. It may be well suited for graduate courses and seminars. The text contains 58 open problems for future research in tractability.

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