Record Nr. UNISA996466591503316 Autore Milman Mario Titolo Extrapolation and optimal decompositions: with applications to analysis / / Mario Milman Pubbl/distr/stampa Berlin, Heidelberg:,: Springer-Verlag,, [1994] ©1994 **ISBN** 3-540-48439-6 Edizione [1st ed. 1994.] Descrizione fisica 1 online resource (XII, 164 p.) Collana Lecture Notes in Mathematics; ; 1580 Classificazione 46M35 Disciplina 511.42 Soggetti Extrapolation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Background on extrapolation theory -- K/J inequalities and limiting embedding theorems -- Calculations with the ? method and applications -- Bilinear extrapolation and a limiting case of a theorem by Cwikel -- Extrapolation, reiteration, and applications -- Estimates for commutators in real interpolation -- Sobolev imbedding theorems and extrapolation of infinitely many operators -- Some remarks on extrapolation spaces and abstract parabolic equations -- Optimal decompositions, scales, and Nash-Moser iteration. This book develops a theory of extrapolation spaces with applications Sommario/riassunto to classical and modern analysis. Extrapolation theory aims to provide a general framework to study limiting estimates in analysis. The book also considers the role that optimal decompositions play in limiting inequalities incl. commutator estimates. Most of the results presented are new or have not appeared in book form before. A special feature of the book are the applications to other areas of analysis. Among them

Sobolev imbedding theorems in different contexts including

derived.

logarithmic Sobolev inequalities are obtained, commutator estimates are connected to the theory of comp. compactness, a connection with maximal regularity for abstract parabolic equations is shown, sharp estimates for maximal operators in classical Fourier analysis are