

1. Record Nr.	UNISA996466493103316
Autore	Cegielski Andrzej
Titolo	Iterative Methods for Fixed Point Problems in Hilbert Spaces [[electronic resource] /] / by Andrzej Cegielski
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-30901-1
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XVI, 298 p. 61 illus., 3 illus. in color.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2057
Disciplina	519.6
Soggetti	Mathematical optimization Functional analysis Calculus of variations Numerical analysis Operator theory Optimization Functional Analysis Calculus of Variations and Optimal Control; Optimization Numerical Analysis Operator Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. 275-289) and index.
Nota di contenuto	1 Introduction -- 2 Algorithmic Operators -- 3 Convergence of Iterative Methods -- 4 Algorithmic Projection Operators -- 5 Projection methods.
Sommario/riassunto	Iterative methods for finding fixed points of non-expansive operators in Hilbert spaces have been described in many publications. In this monograph we try to present the methods in a consolidated way. We introduce several classes of operators, examine their properties, define iterative methods generated by operators from these classes and present general convergence theorems. On this basis we discuss the conditions under which particular methods converge. A large part of the results presented in this monograph can be found in various forms in the literature (although several results presented here are new). We have tried, however, to show that the convergence of a large class of

iteration methods follows from general properties of some classes of operators and from some general convergence theorems.

---