

1. Record Nr.	UNINA9910815294803321
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Titolo	The theory of search games and rendezvous [[electronic resource] /] / by Steve Alpern, Shmuel Gal
Pubbl/distr/stampa	Boston, : Kluwer Academic Publishers, c2003
ISBN	1-280-60847-1 9786610608478 0-306-48212-6
Edizione	[1st ed. 2003.]
Descrizione fisica	1 online resource (336 p.)
Collana	International series in operations research & management science ; ; 55
Altri autori (Persone)	GalShmuel
Disciplina	003
Soggetti	Search theory Game theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [303]-315) and index.
Nota di contenuto	Search Games -- to Search Games -- Search Games in Compact Spaces -- General Framework -- Search for an Immobile Hider -- Search for a Mobile Hider -- Miscellaneous Search Games -- Search Games in Unbounded Domains -- General Framework -- On Minimax Properties of Geometric Trajectories -- Search on the Infinite Line -- Star and Plan Search -- Rendezvous Search -- to Rendezvous Search -- Elementary Results and Examples -- Rendezvous Search on Compact Spaces -- Rendezvous Values of a Compact Symmetric Region -- Rendezvous on Labeled Networks -- Asymmetric Rendezvous on an Unlabeled Circle -- Rendezvous on a Graph -- Rendezvous Search on Unbounded Domains -- Asymmetric Rendezvous on the Line (ARPL) -- Other Rendezvous Problems on the Line -- Rendezvous in Higher Dimensions.
Sommario/riassunto	Search Theory is one of the original disciplines within the field of Operations Research. It deals with the problem faced by a Searcher who wishes to minimize the time required to find a hidden object, or "target. " The Searcher chooses a path in the "search space" and finds the target when he is sufficiently close to it. Traditionally, the target is assumed to have no motives of its own regarding when it is found; it is simply stationary and hidden according to a known distribution (e. g. ,

oil), or its motion is determined stochastically by known rules (e. g. , a fox in a forest). The problems dealt with in this book assume, on the contrary, that the “target” is an independent player of equal status to the Searcher, who cares about when he is found. We consider two possible motives of the target, and divide the book accordingly. Book I considers the zero-sum game that results when the target (here called the Hider) does not want to be found. Such problems have been called Search Games (with the “ze- sum” qualifier understood). Book II considers the opposite motive of the target, namely, that he wants to be found. In this case the Searcher and the Hider can be thought of as a team of agents (simply called Player I and Player II) with identical aims, and the coordination problem they jointly face is called the Rendezvous Search Problem.
