1. Record Nr. UNINA9910823649603321 Van Rijsbergen C. J. <1943-> Autore **Titolo** The geometry of information retrieval / / C.J. van Rijsbergen Cambridge, UK;; New York,: Cambridge University Press, 2004 Pubbl/distr/stampa **ISBN** 1-107-15054-X 1-280-54078-8 9786610540785 0-511-21496-0 0-511-21675-0 0-511-21138-4 0-511-31548-1 0-511-54333-6 0-511-21315-8 Edizione [1st ed.] Descrizione fisica 1 online resource (xii, 150 pages) : digital, PDF file(s) Disciplina 025.04 Computer science - Mathematics Soggetti Information storage and retrieval systems - Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references (p. 120-144) and indexes. Nota di contenuto : 1. Introduction -- : 2. On sets and kinds for IR -- : 3. Vector and Hilbert spaces -- ; 4. Linear transformations, operators and matrices --; 5. Conditional logic in IR -- ; 6. geometry of IR. Information retrieval, IR, the science of extracting information from any Sommario/riassunto potential source, can be viewed in a number of ways: logical, probabilistic and vector space models are some of the most important. In this book, the author, one of the leading researchers in the area, shows how these views can be reforged in the same framework used to formulate the general principles of quantum mechanics. All the usual quantum-mechanical notions have their IR-theoretic analogues, and the standard results can be applied to address problems in IR, such as pseudo-relevance feedback, relevance feedback and ostensive retrieval. The relation with quantum computing is also examined. To keep the

book self-contained appendices with background material on physics

and mathematics are included. Each chapter ends with bibliographic remarks that point to further reading. This is an important, ground-breaking book, with much new material, for all those working in IR, AI and natural language processing.