1. Record Nr. UNINA9910464314903321 Autore Garling D. J. H. Titolo A course in mathematical analysis . Volume 1 Foundations and elementary real analysis / / D. J. H. Garling [[electronic resource]] Cambridge:,: Cambridge University Press,, 2013 Pubbl/distr/stampa 1-107-23794-7 **ISBN** 1-107-31469-0 1-107-30694-9 1-107-25496-5 1-139-42449-1 1-107-30914-X 1-107-31249-3 1-107-30185-8 Descrizione fisica 1 online resource (xvi, 300 pages) : digital, PDF file(s) 515 Disciplina Soggetti Mathematical analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto pt. 1. Prologue: the foundations of analysis -- pt. 2. Functions of a real variable. Sommario/riassunto The three volumes of A Course in Mathematical Analysis provide a full and detailed account of all those elements of real and complex analysis that an undergraduate mathematics student can expect to encounter in their first two or three years of study. Containing hundreds of exercises, examples and applications, these books will become an invaluable resource for both students and instructors. This first volume focuses on the analysis of real-valued functions of a real variable. Besides developing the basic theory it describes many applications, including a chapter on Fourier series. It also includes a Prologue in which the author introduces the axioms of set theory and uses them to construct the real number system. Volume 2 goes on to consider metric and topological spaces and functions of several variables. Volume 3 covers complex analysis and the theory of measure and integration.