Record Nr. UNINA9910461436403321 Autore Korle Hans-Heinrich <1934-> Titolo Infinite series in a history of analysis: stages up to the verge of summability / / Hans-Heinrich Korle Pubbl/distr/stampa Berlin, [Germany];; Boston, [Massachusetts]:,: De Gruyter Oldenbourg, , 2015 ©2015 **ISBN** 3-11-035983-9 3-11-039916-4 Descrizione fisica 1 online resource (142 p.) Collana De Gruyter Textbook 515/.243 Disciplina Soggetti Series, Infinite Mathematics - Philosophy - History Electronic books. 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 and index. Nota di contenuto Frontmatter -- Foreword -- Contents -- 1. The Greek era: Speculation, ideas and the comet of rigor -- 2. Successful experiments on infinite summation -- 3. Series of functions: the prototypes -- 4. Series seriously: the Greek comet reappears -- 5. On the verge of summability -- Appendixes (of notes, proofs, exercises) -- Life Data -- References -- Index Sommario/riassunto "Higher mathematics" once pointed towards the involvement of infinity. This we label analysis. The ancient Greeks had helped it to a first high point when they mastered the infinite. The book traces the history of analysis along the risky route of serial procedures through antiquity. It took quite long for this type of mathematics to revive in our region. When and where it did, infinite series proved the driving force. Not until a good two millennia had gone by, would analysis head towards Greek rigor again. To follow all that trial, error and final accomplishment, is more than studying history: It provides touching, worthwhile access to advanced calculus. Moreover, some steps beyond convergence show

infinite series to naturally fit a wider frame.