Record Nr. UNINA9910972577803321 Autore Guicciardini Niccolo Titolo Isaac Newton on mathematical certainty and method / / Niccolo Guicciardini Cambridge, MA, : MIT Press, c2009 Pubbl/distr/stampa 0-262-29165-7 **ISBN** 1-282-69451-0 9786612694516 0-262-25886-2 Edizione [1st ed.] Descrizione fisica 1 online resource (449 p.) Transformations: studies in the history of science and technology Collana Disciplina 510 Soggetti Mathematical analysis Mathematics - History 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 Contents; Preface; Abbreviations and Conventions; I Preliminaries; 1 Newton on Mathematical Method; 2 Newton on Certainty in Optical Lectures; 3 Descartes on Method and Certainty in the Geometrie; II Against Cartesian Analysis and Synthesis; 4 Against Descartes on Determinate Problems; 5 Against Descartes on Indeterminate Problems; 6 Beyond the Cartesian Canon; III New Analysis and the Synthetic Method: 7 The Method of Series: 8 The Analytical Method of Fluxions: 9 The Synthetic Method of Fluxions; IV Natural Philosophy; 10 The Principia; 11 Hidden Common Analysis; 12 Hidden New Analysis V Ancients and Moderns13 Geometry and Mechanics; 14 Analysis and Synthesis: VI Against Leibniz: 15 The Quarrel with Leibniz: 16 Scribal Publication, 1672-1699; 17 Fluxions in Print, 1700-1715; Conclusion; A Brief Chronology of Newton's Mathematical Work: References; Index Sommario/riassunto An analysis of Newton's mathematical work, from early discoveries to mature reflections, & a discussion of Newton's views on the role & nature of mathematics, in this book Guicciardini reconstructs Newton's

own method by extracting it from his concrete practice.