Record Nr. UNINA9910825088803321 Autore Schemmel Matthias Titolo The English Galileo: Thomas Harriot's work on motion as an example of Preclassical mechanics / / by Matthias Schemmel; edited by Robert S. Cohen, Jrgen Renn, Kostas Gavroglu Dordrecht,: Springer, 2008 Pubbl/distr/stampa **ISBN** 1-281-90416-3 9786611904166 1-4020-5499-8 Edizione [1st ed. 2008.] Descrizione fisica 1 online resource (763 p.) Boston studies in the philosophy of science ; ; v. 268 Collana Altri autori (Persone) CohenRobert S GavroglouKostas RennJrgen Disciplina 531.11 Soggetti Scientists - Great Britain 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. 363-374) and indexes. Harriot's Work on Motion in Context -- Thomas Harriot: Practical Nota di contenuto Mathematician and Pioneer of Modern Science -- Harriot and the Challenge of Projectile Motion -- An Introduction to Harriot's Manuscripts on Motion -- Major Strands of Harriot's Work on Motion --Mathematical Analysis of the Motion of Fall -- Free Fall Experiments and Their Evaluation: The "Weight" of Falling Bodies -- Free Fall Experiments and Their Evaluation: Motion in a Medium -- Graphical Construction of Projectile Trajectories -- Exploration of the Inclined-Plane Conception of Projectile Motion -- Conclusion -- Shared Knowledge and Alternative Solutions in Harriot's and Galileo's Work on Motion -- Facsimile and Transcription -- Notes and Conventions --Thomas Harriot's Notes on Projectile Motion and the Fall of Bodies. Sommario/riassunto The short series The Historical Epistemology of Mechanics presents the long-term development of mechanical knowledge. The books in this series combine the presentation of a broad selection of relevant sources with in-depth analyses of the long-term development of mechanical knowledge focusing on the early modern period. This series is conceived in analogy to the four-volume series on The Genesis of

General Relativity (BSPS 250). The English Galileo, the first book in this series, investigates the shared knowledge of preclassical mechanics by relating the work of Thomas Harriot on motion, documented by a wealth of manuscripts, to that of Galileo and other contemporaries. Harriot and Galileo indeed exploited the same shared knowledge resources in order to approach the same challenging objects. While the paths Harriot traces through the shared knowledge are different from Galileo's, the work of the two scientists displays striking similarities as regards their achievements as well as the problems they were unable to solve. The study of Harriot's parallel work thus allows the exploration of the structure of the shared knowledge of early modern mechanics, to perceive possible alternative histories, and to distinguish between individual peculiarities and shared structures of early modern mechanical reasoning. This study has received two distinguished awards, the Junior Scholar Award of the Georg Agricola Society and the Georg Uschmann Award of the German National Academy of Sciences, Leopoldina.