1. Record Nr. UNINA9910484556803321 Rowe David E. <1950-> Autore Titolo Emmy Noether -- mathematician extraordinaire / / David E. Rowe Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 **ISBN** 3-030-63810-3 Edizione [1st ed. 2021.] 1 online resource (XXI, 339 p.) Descrizione fisica Disciplina 510.924 Soggetti Women mathematicians Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Preface -- 1 Max and Emmy Noether: Mathematics in Erlangen -- 2 Emmy Noether's Long Struggle to Habilitate in Göttingen -- 3 Emmy Noether's Role in the Relativity Revolution -- 4 Noether's Early Contributions to Modern Algebra -- 5 Noether's International School in Modern Algebra -- 6 Emmy Noether's Triumphal Years -- 7 Cast out of her Country -- 8 Emmy Noether in Bryn Mawr -- 9 Memories and Legacies of Emmy Noether -- Bibliography -- Name Index. Although she was famous as the "mother of modern algebra," Emmy Sommario/riassunto Noether's life and work have never been the subject of an authoritative scientific biography. Emmy Noether - Mathematician Extraordinaire represents the most comprehensive study of this singularly important mathematician to date. Focusing on key turning points, it aims to provide an overall interpretation of Noether's intellectual development while offering a new assessment of her role in transforming the mathematics of the twentieth century. Hermann Weyl, her colleague before both fled to the United States in 1933, fully recognized that Noether's dynamic school was the very heart and soul of the famous Göttingen community. Beyond her immediate circle of students, Emmy Noether's lectures and seminars drew talented mathematicians from all over the world. Four of the most important were B.L. van der Waerden, Pavel Alexandrov, Helmut Hasse, and Olga Taussky. Noether's classic papers on ideal theory inspired van der Waerden to recast his research

in algebraic geometry. Her lectures on group theory motivated

Alexandrov to develop links between point set topology and combinatorial methods. Noether's vision for a new approach to algebraic number theory gave Hasse the impetus to pursue a line of research that led to the Brauer–Hasse–Noether Theorem, whereas her abstract style clashed with Taussky's approach to classical class field theory during a difficult time when both were trying to find their footing in a foreign country. Although similar to Proving It Her Way: Emmy Noether, a Life in Mathematics, this lengthier study addresses mathematically minded readers. Thus, it presents a detailed analysis of Emmy Noether's work with Hilbert and Klein on mathematical problems connected with Einstein's theory of relativity. These efforts culminated with her famous paper "Invariant Variational Problems," published one year before she joined the Göttingen faculty in 1919.