Record Nr. UNISALENTO991002951599707536 Autore Knebusch, Manfred Titolo Manis valuations and Prüfer extensions II [e-book] / Manfred Knebusch, **Tobias Kaiser** Cham: Springer, 2014 Pubbl/distr/stampa **ISBN** 9783319032122 Descrizione fisica 1 online resource (xii, 190 p.) Collana Lecture notes in mathematics, 1617-9692; 2103 Classificazione **AMS 13A18** AMS 13B02 AMS 13F05 LC QA251.3 Altri autori (Persone) Kaiser, Tobiasauthor Disciplina 512.44 Soggetti Algebra Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Overrings and PM-Spectra; Approximation Theorems; Kronecker Nota di contenuto extensions and star operations; Basics on Manis valuations and Prufer extensions; Multiplicative ideal theory; PM-valuations and valuations of weaker type: Overrings and PM-Spectra: Approximation Theorems: Kronecker extensions and star operations; Appendix; References; Index Sommario/riassunto This volume is a sequel to 'Manis Valuation and Prüfer Extensions I,' LNM1791. The Prüfer extensions of a commutative ring A are roughly those commutative ring extensions R / A, where commutative algebra is governed by Manis valuations on R with integral values on A. These valuations then turn out to belong to the particularly amenable subclass of PM (=Prüfer-Manis) valuations. While in Volume I Prüfer extensions in general and individual PM valuations were studied, now the focus is on families of PM valuations. One highlight is the presentation of a very general and deep approximation theorem for PM valuations, going back to Joachim Gräter's work in 1980, a far-reaching extension of the classical weak approximation theorem in arithmetic. Another highlight is a theory of so called 'Kronecker extensions,' where PM valuations are put to use in arbitrary commutative ring extensions

in a way that ultimately goes back to the work of Leopold Kronecker