

1. Record Nr.	UNINA9910257380703321
Autore	Abrams Gene
Titolo	Leavitt Path Algebras / / by Gene Abrams, Pere Ara, Mercedes Siles Molina
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 2017
ISBN	1-4471-7344-9
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIII, 289 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2191
Disciplina	512.74
Soggetti	Associative rings Rings (Algebra) K-theory Operator theory Graph theory Associative Rings and Algebras K-Theory Operator Theory Graph Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1 The basics of Leavitt path algebras: motivations, definitions and examples -- 2 Two-sided ideals -- 3 Idempotents, and finitely generated projective modules -- 4 General ring-theoretic results -- 5 Graph C*-algebras, and their relationship to Leavitt path algebras -- 6 K-theory -- 7 Generalizations, applications, and current lines of research -- References -- Index.
Sommario/riassunto	This book offers a comprehensive introduction by three of the leading experts in the field, collecting fundamental results and open problems in a single volume. Since Leavitt path algebras were first defined in 2005, interest in these algebras has grown substantially, with ring theorists as well as researchers working in graph C*-algebras, group theory and symbolic dynamics attracted to the topic. Providing a historical perspective on the subject, the authors review existing arguments, establish new results, and outline the major themes and

ring-theoretic concepts, such as the ideal structure, \mathbb{Z} -grading and the close link between Leavitt path algebras and graph C^* -algebras. The book also presents key lines of current research, including the Algebraic Kirchberg Phillips Question, various additional classification questions, and connections to noncommutative algebraic geometry. Leavitt Path Algebras will appeal to graduate students and researchers working in the field and related areas, such as C^* -algebras and symbolic dynamics. With its descriptive writing style, this book is highly accessible.
