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	Titolo	Geometry of Linear Matrix Inequalities : A Course in Convexity and Real Algebraic Geometry with a View Towards Optimization / / by Tim Netzer, Daniel Plaumann
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	Descrizione fisica	1 online resource (167 pages)
	Collana	Compact Textbooks in Mathematics, , 2296-455X
	Disciplina	929.605
	Soggetti	Geometry, Algebraic
		Convex geometry
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	Sommario/riassunto	This textbook provides a thorough introduction to spectrahedra, which are the solution sets to linear matrix inequalities, emerging in convex and polynomial optimization, analysis, combinatorics, and algebraic geometry. Including a wealth of examples and exercises, this textbook guides the reader in helping to determine the convex sets that can be represented and approximated as spectrahedra and their shadows (projections). Several general results obtained in the last 15 years by a variety of different methods are presented in the book, along with the necessary background from algebra and geometry.