

1. Record Nr.	UNINA9910742499203321
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Titolo	Linear Algebra for the Sciences [[electronic resource] /] / by Manuel Benz, Thomas Kappeler
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-27220-X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (268 pages)
Collana	La Matematica per il 3+2, , 2038-5757 ; ; 151
Altri autori (Persone)	KappelerThomas
Disciplina	512.5
Soggetti	Algebras, Linear Algebra Linear Algebra
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I Systems of linear equations -- 1 Introduction -- 2 Systems with two equations and two unknowns -- 3 Gaussian elimination -- Part II Matrices and related topics -- 4 Basic operations -- 5 Linear dependence, bases, coordinates -- 6 Determinants -- Part III Complex numbers -- 7 Complex numbers: definition and operations -- 8 The Fundamental Theorem of Algebra -- 9 Linear systems with complex coefficients -- Part IV Vector spaces and linear maps -- 10 Vector spaces and their linear subspaces -- 11 Linear maps -- 12 Inner products on K-vector spaces -- Part V Eigenvalues and eigenvectors -- 13 Eigenvalues and eigenvectors of C-linear maps -- 14 Eigenvalues and eigenvectors of R-linear maps -- 15 Quadratic forms on R^n -- Part VI Differential equations -- 16 Introduction -- 17 Linear ODEs with constant coefficients of first order -- 18 Linear ODEs with constant coefficients of higher order -- Appendix A Solutions.
Sommario/riassunto	This book is based on a course for first-semester science students, held by the second author at the University of Zurich several times. Its goal is threefold: to have students learn a minimal working knowledge of linear algebra, acquire some computational skills, and familiarize them with mathematical language to make mathematical literature more accessible. Therefore, we give precise definitions, introduce helpful notations, and state any results carefully worded. We provide no

proofs of these results but typically illustrate them with numerous examples. Additionally, for better understanding, we often give supporting arguments for why they are valid.
