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	Titolo	Real Algebraic Varieties / / by Frédéric Mangolte
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	Descrizione fisica	1 online resource (XVIII, 444 p. 60 illus., 28 illus. in color.)
	Collana	Springer Monographs in Mathematics, , 2196-9922
	Disciplina	516.35
	Soggetti	Algebraic geometry
		Manifolds (Mathematics)
		Functions of complex variables
		Algebraic Geometry
		Manifolds and Cell Complexes
		Several Complex Variables and Analytic Spaces
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Preface -- Introduction, Algebraic models of smooth manifolds -- 1. Algebraic varieties -- 2. R-varieties -- 3. Topology of varieties with an involution -- 4. Surfaces -- 5. Algebraic approximation -- 6. Three dimensional varieties -- Appendices -- Bibliography -- Glossary of Notations -- Index -- List of Examples -- List of Figures.
	Sommario/riassunto	This book gives a systematic presentation of real algebraic varieties. Real algebraic varieties are ubiquitous. They are the first objects encountered when learning of coordinates, then equations, but the systematic study of these objects, however elementary they may be, is formidable. This book is intended for two kinds of audiences: it accompanies the reader, familiar with algebra and geometry at the masters level, in learning the basics of this rich theory, as much as it brings to the most advanced reader many fundamental results often missing from the available literature, the "folklore". In particular, the introduction of topological methods of the theory to non-specialists is one of the original features of the book. The first three chapters introduce the basis and classical methods of real and complex algebraic geometry. The last three chapters each focus on one more

specific aspect of real algebraic varieties. A panorama of classical knowledge is presented, as well as major developments of the last twenty years in the topology and geometry of varieties of dimension two and three, without forgetting curves, the central subject of Hilbert's famous sixteenth problem. Various levels of exercises are given, and the solutions of many of them are provided at the end of each chapter.
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