1. Record Nr. UNINA9910984591303321

Autore	Del Centina Andrea
Titolo	From Here to Infinity : Tracing the Origin and Development of Projective Geometry / / by Andrea Del Centina, Alessandro Gimigliano
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031725852 9783031725845
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (969 pages)
Collana	Sources and Studies in the History of Mathematics and Physical Sciences, , 2196-8829
Altri autori (Persone)	GimiglianoAlessandro
Disciplina	510.9
Soggetti	Mathematics History Geometry, Projective History of Mathematical Sciences Projective Geometry Matemàtica Història Geometria projectiva Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	- 1. The Greek Legacy -- 2. Perspective in the Renaissance -- 3. New ways of looking at conics -- 4. Desargues, the dawn of projective geometry -- 5. Pascal’s geometrical achievements -- 6. An interlude a century and a half long -- 7. Towards a new geometry -- 8. Poncelet, the projective properties of figures -- 9. The algebraic way to projective geometry -- 10. The synthetic route: the contributions of Steiner and Chasles -- 11. Von Staudt’s pure synthetism -- 12. Projective geometry 1870-1930 and beyond.
Sommario/riassunto	This monograph traces the development of projective geometry from its Greek origins to the early 20th century. It covers Renaissance perspective studies and insights from the late sixteenth to seventeenth centuries, examining the contributions of Desargues and Pascal. Most of the book is devoted to the evolution of the subject in the 19th

century, from Carnot to von Staudt. In particular, the book offers an unusually thorough appreciation of Brianchon's work, a detailed study of Poncelet's innovations, and a remarkable account of the contributions of Möbius and Plücker. It also addresses the difficult question of the historical relationship between synthetic and analytic points of view in geometry, analyzing the work of prominent synthetic geometers Steiner, Chasles, and von Staudt in detail. The book concludes around 1930, after the synthetic point of view was axiomatized and the analytic point of view became intertwined with algebraic geometry. Balancing historical analysis with technical precision and providing deep insights into the evolution of the mathematics, this richly illustrated book serves as a central reference on the history of projective geometry.