1.

Record Nr.	UNINA9910967084603321
Autore	Gray Jeremy <1947->
Titolo	Henri Poincaré : a scientific biography / / Jeremy Gray
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, 2013
ISBN	9781283833752
	1283833751
	9781400844791
	1400844797
Edizione	[Course Book]
Descrizione fisica	1 online resource (609 p.)
Classificazione	MAT015000BIO015000MAT000000SCI055000TEC009000
Disciplina	509.2
	B
Soggetti	Scientists - France
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Front matter -- Contents -- List of Figures -- Preface -- Introduction -- 1. The Essayist -- 2. Poincaré's Career -- 3. The Prize Competition of 1880 -- 4. The Three Body Problem -- 5. Cosmogony -- 6. Physics -- 7. Theory of Functions and Mathematical Physics -- 8. Topology -- 9. Interventions in Pure Mathematics -- 10. Poincaré as a Professional Physicist -- 11. Poincaré and the Philosophy of Science -- 12. Appendixes -- References -- Name Index -- Subject Index
Sommario/riassunto	"Henri Poincare (1854-1912) was not just one of the most inventive, versatile, and productive mathematicians of all time--he was also a leading physicist who almost won a Nobel Prize for physics and a prominent philosopher of science whose fresh and surprising essays are still in print a century later. The first in-depth and comprehensive look at his many accomplishments, Henri Poincare explores all the fields that Poincare touched, the debates sparked by his original investigations, and how his discoveries still contribute to society today. Math historian Jeremy Gray shows that Poincare's influence was wide-ranging and permanent. His novel interpretation of non-Euclidean geometry challenged contemporary ideas about space, stirred heated discussion, and led to flourishing research. His work in topology began the modern study of the subject, recently highlighted by the successful

resolution of the famous Poincare conjecture. And Poincare's reformulation of celestial mechanics and discovery of chaotic motion started the modern theory of dynamical systems. In physics, his insights on the Lorentz group preceded Einstein's, and he was the first to indicate that space and time might be fundamentally atomic. Poincare the public intellectual did not shy away from scientific controversy, and he defended mathematics against the attacks of logicians such as Bertrand Russell, opposed the views of Catholic apologists, and served as an expert witness in probability for the notorious Dreyfus case that polarized France. Richly informed by letters and documents, Henri Poincare demonstrates how one man's work revolutionized math, science, and the greater world"--