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Sommario/riassunto	The theory relating algebraic curves and Riemann surfaces exhibits the unity of mathematics: topology, complex analysis, algebra and geometry all interact in a deep way. This textbook offers an elementary

introduction to this beautiful theory for an undergraduate audience. At the heart of the subject is the theory of elliptic functions and elliptic curves. A complex torus (or “donut”) is both an abelian group and a Riemann surface. It is obtained by identifying points on the complex plane. At the same time, it can be viewed as a complex algebraic curve, with addition of points given by a geometric “chord-and-tangent” method. This book carefully develops all of the tools necessary to make sense of this isomorphism. The exposition is kept as elementary as possible and frequently draws on familiar notions in calculus and algebra to motivate new concepts. Based on a capstone course given to senior undergraduates, this book is intended as a textbook for courses at this level and includes a large number of class-tested exercises. The prerequisites for using the book are familiarity with abstract algebra, calculus and analysis, as covered in standard undergraduate courses.