When an important mathematician celebrates a landmark birthday, other mathematicians sometimes gather together to give papers in appreciation of the life and work of the great person. When a mathematician as influential and productive as Euler celebrates an anniversary as important as the 300th, a single meeting isn't sufficient to contain all of the contributions.

Leonhard Euler (1707–1783) was the most important mathematician of the 18th century. His collected works, which number more than 800 books and articles, fill more than 70 large volumes. He revolutionized real analysis and mathematical physics, single-handedly established the field of analytic number theory, and made important contributions to almost every other branch of mathematics. A great pedagogue as well as a great researcher, Euler's textbooks educated the next generation of mathematicians.

During the years leading up to Leonhard Euler's tercentenary, at more than a dozen academic meetings across the USA and Canada, mathematicians and historians of mathematics honored Euler in papers detailing his life and work. This book collects more than 20 papers based on some of the most memorable of these contributions.

These papers are accessible to a broad mathematical audience. They will appeal to those who already have an interest in the history of mathematics. For those who don't, they will serve as a compelling introduction to the subject, focused on the accomplishments of one of the great mathematical minds of all time. Topics include analysis—especially Euler's fearless and masterful manipulations of power series—geometry, algebra, probability, astronomy and mechanics.