

Abstract

The year 2007 marks the 300th anniversary of the birth of one of the Enlightenment's most important mathematicians and scientists, Leonhard Euler. This volume is a collection of 24 essays by some of the world's best Eulerian scholars from seven different countries about Euler: his life, his work and his legacy.

Some of the essays are historical, including much previously unknown information about Euler's life, his activities in the St. Petersburg Academy, the influence of the Russian Princess Dashkova, and Euler's philosophy. Others describe his influence on the subsequent growth of European mathematics and physics in the 19th century. Still others give technical details of Euler's innovations in probability, number theory, geometry, analysis, astronomy, mechanics and other fields of mathematics and science.

Inhalt

*Leonhard Euler: Life and Thought R. S. Calinger - Leonhard Euler and Russia P. Hoffmann - Princess Dashkova, Euler, and the Russian Academy of Sciences R. S. Calinger, E. N. Polyakhova - Leonhard Euler and Philosophy W. Breidert - Images of Euler F. Fasanelli - Euler and Applications of Analytical Mathematics to Astronomy C. Wilson - Euler and Indian Astronomy, K. Plofker - Euler and Kinematics T. Koetsier - Euler on Rigid Bodies S. G. Langton - Euler's Analysis Textbooks V. J. Katz - Euler and the Calculus of Variations R. Thiele - Euler, D'Alembert and the Logarithm Function R. E. Bradley - Some Facets of Euler's Work on Series C. E. Sandifer - The Geometry of Leonhard Euler. H. S. White
Cyclotomy: From Euler through Vandermonde to Gauss O. Neumann - Euler and Number Theory: A Study in Mathematical Invention J. Suzuki - Euler

and Lotteries D. R. Bellhouse - Euler's Science of Combinations B. Hopkins,
R. Wilson - The Truth about Königsberg B. Hopkins, R. Wilson - The Poly-
hedral Formula D. Richeson - On the Recognition of Euler among the French,
1790 - 1830 I. Grattan-Guinness - Euler's Influence on the Birth of Vector
Mechanics S. Caparrini - Euler's Contribution to Differential Geometry and
its Reception K. Reich - Euler's Mechanics as a Foundation of Quantum Me-
chanics D. Suisky