



BECKENBACH BOOK PRIZE

The Beckenbach Book Prize, established in 1986, is the successor to the MAA Book Prize, which was established in 1982. It is named for the late Edwin Beckenbach, a long-time leader in the publications program of the Association and a well-known professor of mathematics at the University of California at Los Angeles. This prize is awarded to an author of a distinguished, innovative book published by the MAA. The award is not given on a regularly scheduled basis, but is given only when a book appears that is judged to be truly outstanding.

Citation

William Dunham

Euler: The Master of Us All, The Mathematical Association of America, Dolciani Mathematical Expositions, Vol. 22, 1999.

William Dunham's exposition of a selection of the innovative and influential work of the brilliant and prolific mathematician Leonhard Euler (1707–1783) in *Euler: The Master of Us All* is itself innovative and brilliant in its organization and scope, its clarity and verve, and its accessibility and appeal. After providing a biographical sketch, Dunham devotes one chapter each to important contributions by Euler to eight areas of mathematics. He begins each chapter with a description of the historical development of the topic up to the time of Euler. The central “Enter Euler” section focuses on selected groundbreaking contributions of Euler to the topic. Each chapter closes with subsequent work of Euler and other mathematicians on the topic. Despite the author's expressed regret over having to make a very narrow selection from Euler's immense body of work, readers are certain to find topics that appeal to them from among algebra, geometry, logarithms, complex variables, infinite series, number theory (elementary and analytic), and combinatorics, and to be drawn to the others by Dunham's witty and engaging style. Indeed, Dunham is well known for writing mathematical page-turners, and this book is no exception: the seamless presentation of mathematics and its history is so entertaining, accessible, clear, and lively that it is difficult to put the book down until one has read it from cover to cover. Besides his inimitable writing style, the author is to be commended for his inspired yet careful selection and organization of historical and mathematical material and for his presentation of Euler's mathematical work in such a clear and accessible yet faithful manner. The Mathematical Association of America is pleased to name William Dunham as the recipient of the 2008 Beckenbach Book Prize.

Biographical Note

William Dunham is the Koehler Professor of Mathematics at Muhlenberg College. He holds a B.S. from the University of Pittsburgh (1969) and an M.S. (1970) and Ph.D. (1974) from The Ohio State University.

Dunham has authored four books—*Journey through Genius: The Great Theorems of Mathematics* (Wiley, 1990), *The Mathematical Universe* (Wiley, 1994), *Euler: The Master of Us All* (MAA, 1999), and *The Calculus Gallery: Masterpieces from Newton to Lebesgue* (Princeton, 2005)—and has edited *The Genius of Euler: Reflections on His Life and Work* (MAA, 2007) as part of the Euler tercentenary celebration. He previously received the MAA's George Pólya Award (1992), Trevor Evans Award (1997), and Lester R. Ford Award (2006) for expository writing; and *The Mathematical Universe* was recognized by the Association of American Publishers as the Best Mathematics Book of 1994.

Response from William Dunham

To be awarded the Beckenbach Book Prize for my book on Euler is a career highlight, and I am grateful to the prize committee for this honor. I want to thank the MAA's inimitable Don Albers, who launched this project in the summer of 1990 and encouraged it at every step along its journey to publication in 1999. Likewise I thank my wife and Muhlenberg colleague, Penny Dunham, who has played a key role in everything I've done for nearly four decades. Last but not least, I tip my hat to the great Leonhard Euler, a mathematician whose legendary output could generate a multitude of books like this one.