

William Dunham

A Tribute to Euler

Among history's greatest mathematicians was Leonhard Euler (1707-1783) of Switzerland. The remarkable quality of Euler's achievements is matched only by their equally remarkable quantity – his collected works contain over 25,000 pages of pure and applied mathematics! His insight, industry, and ingenuity prompted Laplace to characterize Euler as “the master of us all.”

In this talk, we sketch Euler's life and mention some of his contributions to number theory, algebra, and other branches of the subject. Then we examine a pair of beautiful Eulerian theorems: one addressing the so-called partitioning of whole numbers and the other establishing what is now known as “Euler's identity.” Such bold and clever arguments give a sense of this towering genius from the history of mathematics.

NOTE: This talk should be accessible to any student of calculus or beyond.