

William Dunham

University of Pennsylvania

"An Afternoon with Euler"

Monday, September 29, 2014

Talk at 4:00 – H109 Tea at 3:30 – KINSC Math Lounge, H208

Abstract:

Among history's greatest mathematicians is Leonhard Euler (1707-1783), the Swiss genius who produced an astonishing 25,000 pages of pure and applied mathematics of the highest quality.

In this talk, we sketch Euler's life and describe a few of his contributions to number theory, algebra, and other branches of mathematics. Then we examine a particular proof: his derivation of the so-called "Euler Identity" – i.e., $e^{ix} = cosx + i sinx$ – via integral calculus.

Condorcet, in his *Eulogy to Euler*, observed that "All mathematicians now alive are his disciples." I hope to show that these words are as true today as when first written down over two centuries ago.

NOTE: This talk should be accessible to anyone who has gone through the calculus sequence.

HAVERFORD COLLEGE