

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, March 13

3:00 – 4:00 PM

Maria Sanford, Room 101

THE BASEL PROBLEM

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Abstract: On March 14 (3.14) each year countries, where month/day format is used, celebrate “Pi-day”, or “Pi-approximation day” ($\pi = 3.1415\dots$).

In this talk we will say first a few words about the history of pi-day and then we will talk about the Basel Problem and its solution. (The Basel Problem asks about the exact value of the infinite sum $1 + \frac{1}{4} + \frac{1}{9} + \frac{1}{16} + \dots + \frac{1}{n^2} + \dots$.)

We will begin with the history of the problem and will say a few words about some mathematicians related directly or indirectly to it, including some mathematicians who were involved in disputes or controversy from the beginning of the 18th century. We will mention, among others, the names of Pietro Mengoli, the mathematicians from the Bernoulli family, l’Hôpital, Leibniz, Newton, and Euler. And as it should be expected, the number π will appear frequently in our talk.

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<http://www.math.ccsu.edu/gotchev/colloquium/>