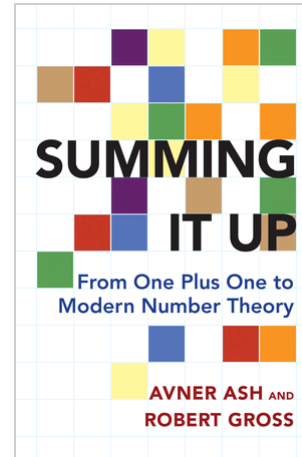


Department of Mathematics

Spring 2017 Colloquium Series



“Summing it Up”

A video presentation of a talk given at Google by Avner Ash and Robert Gross on August 23, 2016

Thursday, February 16, 2017

Behavioral and Social Sciences Building Room 204, 4 pm

Summing It Up, published in May 2016, is a book about number theory, for the proverbial “general audience”, concentrating on sums and series. It begins with very simple questions about whole numbers, such as “what is the sum of the first n k^{th} powers” and “how many ways can you break up a positive whole number into whole number parts” and shows how such questions lead naturally to the use of calculus and infinite series. The more advanced methods, besides providing new insight into the original questions, lead to further ideas and new questions. The book ends by discussing “modular forms”, which are certain infinite series that were crucial in the proof of Fermat’s Last Theorem.

In this video presentation, the authors will attempt to explain what number theory is through examples, notably Bernoulli numbers. They will discuss the question “why might (should?) a normal person be interested in number theory?” (Spoiler alert: there is no final answer to that question.)

The speakers are both professors of mathematics at Boston College. They both do research in number theory and they both have strong interests in books of all sorts, reading them as well as writing them.

[Text above taken from YouTube with some minor modifications]

To view this poster online, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>

***We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS
building at 3:30 pm on Thursday.***