## James Madison University Shenandoah Undergraduate Mathematics and Statistics Conference We are back in person! Join us at JMU!

SUMS 2022 – Saturday, October 29, 2022

## **Great Moments of the Riemann Zeta Function**

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Movies have great moments and sports have great moments, but mathematics has the greatest moments of all. In this talk, we will explore moments of the Riemann zeta function (also known as mean values), and we will revisit the momentous discoveries of Hardy, Littlewood, and Ingham in the 1920s. We will also discuss memorable moments that today's number theorists have encountered as they work on open problems related to the Riemann Hypothesis.



**Opening Speaker:** Jennifer Beineke, Western New England University



## Why does Ramanujan, The Man Who Knew Infinity, matter?

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Dr. Ono is an associate producer of the Hollywood film, "The Man Who Knew Infinity" starring Dev Patel and Jeremy Irons about Srinivasa Ramanujan, a selftrained two-time college dropout who left behind three notebooks filled with equations that mathematicians are still trying to figure out today. Ramanujan claimed his ideas came to him as visions from an Indian goddess. This lecture is about why Ramanujan matters. The answers to this question extend far beyond the world of equations and formulas. Dr. Ono — who specializes in number theory, especially in integer partitions, modular forms, moonshine, and the fields of interest to Srinivasa Ramanujan — will share several clips from the film in the lecture, and will tell stories about the production and promotion of the film.

Closing Speaker: Ken Ono, The University of Virginia

Register by **October 14** for a link to submit a presentation.

General registration active through **October 27**.

For more information visit us at: <u>www.jmu.edu/mathstat/sums</u> or email us at <u>sums@jmu.edu</u>

