Pacific Institute *for the* Mathematical Sciences

PIMS- UBC Math Distinguished Lecture Series
Ken Ono (Emory University)

Nov 9, 2017
Room: ESB 2012

University of British Columbia
Vancouver, BC
3:30pm

Polya's Program for the Riemann Hypothesis and Related Problems

In 1927 Polya proved that the Riemann Hypothesis is equivalent to the hyperbolicity of Jensen polynomials for Riemann's Xi-function. This hyperbolicity has only been proved for degrees d=1, 2, 3. We prove the hyperbolicity of 100% of the Jensen polynomials of every degree. We obtain a general theorem which models such polynomials by Hermite polynomials. This theorem also allows us to prove a conjecture of Chen, Jia, and Wang on the partition function. This is joint work with Michael Griffin, Larry Rolen, and Don Zagier.

KEN ONO is the Asa Griggs Candler Professor of Mathematics at Emory University. He is considered to be an expert in the theory of integer partitions and modular forms. His contributions include several monographs and over 150 research and popular articles in number theory, combinatorics and algebra. He received his Ph.D. from UCLA and has received many awards for his research in number theory, including a Guggenheim Fellowship, a Packard Fellowship and a Sloan Fellowship. He was awarded a Presidential Early Career Award for Science and Engineering (PECASE) by Bill Clinton in 2000 and he was named the National Science Foundation's Distinguished Teaching Scholar in 2005. He serves as Editor-in-Chief for several journals and is an editor of The Ramanujan Journal. Visit his web page at http://www.mathcs.emory.edu/~ono/

Light refreshments will be served in ESB 4133 from 3:00pm

For more details please visit the PIMS Webpage at:
https://www.pims.math.ca/scientific-event/171109-pumdcko