



Title: Identities

Prof Bruce C. Berndt
Department of Mathematics
University of Illinois at Urbana-Champaign



Date: 31 May 2017 (Wednesday)
Time: Colloquium: 11.00am to 12.00pm
Refreshments: 12.00pm to 1.00pm
Venue: Colloquium: MAS Executive Classroom 2, MAS-03-07
School of Physical and Mathematical Sciences
Refreshments: MAS Atrium

Abstract

As the title suggests, this lecture features mathematical identities. The identities we have chosen (we hope) are interesting, fascinating, surprising, and beautiful! Many of the identities are due to Ramanujan. Topics behind the identities include partitions, continued fractions, sums of squares, theta functions, Bessel functions, q -series, other infinite series, and infinite integrals.

Speaker Biography

Born in St. Joseph, Michigan, Bruce Carl Berndt graduated from Albion College in 1961, where he studied mathematics and physics, and ran track. He received his doctoral degree from the University of Wisconsin-Madison in 1966. After lecturing for one year at the University of Glasgow, in 1967, he assumed a position at the University of Illinois at Urbana-Champaign, where he has remained since. Berndt is an analytic number theorist who for over 40 years has devoted almost all of his research efforts toward proving the claims left behind by Ramanujan in his earlier notebooks and lost notebook. In 1996, Berndt was awarded the Steele Prize for Exposition from the American Mathematical Society for his volumes on Ramanujan's notebooks. With George Andrews, he is currently preparing volumes on Ramanujan's lost notebook. Berndt is especially proud of and thankful for the thirty-five students who have completed their Ph.D. degrees under his direction.

Host: Associate Professor Chan Song Heng

Division of Mathematical Sciences, School of Physical and Mathematical Sciences