Identities

Bruce C. Berndt

Department of Mathematics, University of Illinois at Urbana-Champaign

Email: berndt@math.uiuc.edu

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.