Meeting: 1001, Evanston, Illinois, SS 22A, Special Session on Special Functions, Orthogonal Polynomials, and their Applications

Bruce C. Berndt* (berndt@math.uiuc.edu), Department of Mathematics, University of Illinois, 1409 West Green Street, Urbana, IL 61801. A conditionally convergent double series of ordinary Bessel functions in Ramanujan's lost notebook.

In his lost notebook, Ramanujan states without proofs two identities for doubly infinite series of Bessel functions. We examine one of these identities and show that it can be equivalently formulated as an identity between two conditionally convergent trigonometric series (Received August 27, 2004)