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

Mourad E H Ismail* (ismail@math.ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 33647, and Dennis Stanton (stanton@math.umn.edu), School of Mathematics, University of Minnesota, Minneapolis, MN 55455. Ramanujan Continued Fractions and Orthogonal Polynomials.

We show several continued fractions of Ramanujan are related to continued J-fractions of orthogonal polynomials. This connection explains the origin of these continued fractions and offers many generalizations. This work was motivated by recent papers by Andrews, Berndt and their coauthors. (Received August 30, 2004)