1014-33-805   **Mourad E. H. Ismail*** (`ismail@math.ucf.edu`), Department of Mathematics, University of Central Florida, Orlando, FL 32816, and **Dennis Stanton** (`stanton@math.umn.edu`), School of Mathematics, University of Minnesota, Minneapolis, MN 55455. *Ramanujan's continued fractions via orthogonal polynomials.*

Ramanujan's lost note book contained several continued fraction results. One of them has three limit points points and was studied by G. Andrews, B. Berndt, J. Sohn, A. Yee, and A. Zaharescu, in Trans. Amer. Math. Soc. 365, (2003), 2397-2411, and Adv. Math. 192 (2005), 231–258. We show how the evaluation of the limit points can be done using orthogonal polynomials introduced by Ismail and Mulla in 1987. We also generalize the continued fraction to the case of k limit points. A qualitative result about general continued fractions with k limit points is also proved. We will also discuss other continued fractions from the lost note book and indicate their connection to orthogonal polynomials of Al-Salam and Ismail. (Received September 24, 2005)