

1023-33-1177

Tim Huber* (tjhuber@math.uiuc.edu). *Zeros of Generalized Rogers Ramanujan Series*. Preliminary report.

The series expansions for the zeros of $f(z) := \sum_{n=1}^{\infty} \frac{q^{n^2} z^n}{(q; q)_n}$, $|q| < 1$, were considered by Ramanujan and appear on page 57 of the Lost Notebook. In this talk we will see how to generalize the work of George Andrews and Bruce Berndt in chapter 13 of their book on the Lost Notebook to study series expansions for zeros of $\sum_{n=1}^{\infty} \frac{q^{n^2} z^n}{(q; q)_n (aq; q)_n}$ and related functions. (Received September 25, 2006)