1056-11-2153 **Maria Monks***, Department of Mathematics, M.I.T., Cambridge, MA. *Modular forms arising from $Q(n)$ and Dyson's rank.*

Let $R(w;q)$ be Dyson's generating function for partition ranks. For roots of unity $\zeta \neq 1$, it is known that $R(\zeta;q)$ and $R(\zeta;1/q)$ are given by harmonic Maass forms, Eichler integrals, and modular units. We show that modular forms arise from $G(w;q)$, the generating function for ranks of partitions into distinct parts, in a similar way. If $D(w;q) := (1+w)G(w;q) + (1-w)G(-w;q)$, then for roots of unity $\zeta \neq \pm 1$ we show that $q^{\frac{1}{12}} \cdot D(\zeta;q)D(\zeta^{-1};q)$ is a weight 1 modular form. Although $G(\zeta;1/q)$ is not well defined, we show that it gives rise to natural sequences of q-series whose limits involve infinite products (and modular forms when $\zeta = 1$). (Received September 29, 2009)