Dustin G Hedmark* (dustin.hedmark@gmail.com), 221 Loch Lomond Drive, Lexington, KY 40517. Box Polynomials.

We define the Box polynomial, $B_{m, n}(x)$, as the sum of $\prod_{i}\left(x+\lambda_{i}\right)$ over all partitions $\lambda$ that fit in the $m$ by $n$ grid. We give interesting properties of the coefficients of of $B_{m, n}$ and also give properties of its roots, including asymptotics. This is joint work with Richard Ehrenborg and Cyrus Hettle, both of the University of Kentucky. (Received February 07, 2017)

