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Janine E. Janoski*, janoski@clemson.edu, and **Neil J. Calkin, Brian Bowers, Kerry Gannon, Katie Jones** and **Anna Kirkpatrick**. *Log-concavity of the Partition Function*. Preliminary report.

A sequence a_n is log-concave if for every $n \geq 1$

$$a_n^2 \geq a_{n+1}a_{n-1}. \tag{1}$$

Let $p(n)$ be the number of partitions of n . We show that $p(n)$ is log-concave for $n \geq 26$. For $n < 26$, $p(n)$ satisfies (1) precisely when n is even. (Received September 14, 2011)