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Joshua Harrington and **Lenny Jones*** (lkjone@ship.edu), Department of Mathematics, Shippensburg University, Shippensburg, PA 17257, and **Alicia Lamarche**. *The Average Order of an Element of the Symmetric Group*. Preliminary report.

Let μ_n denote the average order of an element of the symmetric group on n letters. In 1968, Erdős and Turán conjectured that

$$\log(\mu_n) = O\left(\sqrt{n/\log(n)}\right).$$

Schmutz proved this conjecture in 1989. His proof, which is nontrivial and relies on very technical results from partition theory, can be used to determine the smallest positive constant C such that

$$\mu_n \leq n!^C \quad \text{for all } n \geq 1.$$

We determine C using a technique that requires only elementary methods. (Received September 10, 2014)