962-55-700 **Michael J Fisher*** (mjf7@lehigh.edu), Department of Mathematics, 14 East Packer Avenue, Bethlehem, PA 18015. *Proof of an Exponent Conjecture of Bousfield.*

In an August 1999 paper, Bousfield conjectured that if p is an odd prime, then the p-exponent of the spectrum $\Phi SU(n)$ equals $n-1+nu_p((n-1)!)$. Here Φ is a v_1-telescope functor from the homotopy category of pointed CW-complexes to the stable homotopy category, and $nu_p(-)$ denotes the exponent of p in an integer. In his paper Bousfield showed that the p-exponent of $\Phi SU(n)$ is equal to the p-exponent of a particular quotient Q_n of an associated Adams module M_n. We prove Bousfield's conjecture by computing the p-exponent of Q_n. (Received September 21, 2000)