1117-05-370 **George E Andrews*** (gea1@psu.edu), Department of Mathematics, The Pennsylvania State University, University Park, PA 16802. *Implications of the Alladi-Schur Theorem.* Preliminary report.

In 1926, I. Schur proved that if A(n) equals the number of partitions of n into parts congruent to 1 or 5 modulo 6, and B(n) equals the number of partitions of n in which any two parts differ by at least 3 and multiples of 3 differ by more than 3, then A(n)=B(n). In the 1990's K. Alladi noted that if C(n) equals the number of partitions of n into odd parts none repeated more than twice, then also C(n)=B(n). Recently we proved the following refinement of the Alladi-Schur theorem: THEOREM. Let C(m,n) denote the number of partitions among those enumerated by C(n) that have exactly m parts. Let B(m,n) denote the number of partitions among those enumerated by B(n) where the number of odd parts plus twice the number of even parts equals m. Then B(m,n)=C(m,n). In this talk, we support the contention that, of all the equivalent versions of Schur's original theorem, the Alladi-Schur theorem is the truly intrinsic version of the theorem. This will include a discussion of the implications for the study of partition identities of this nature. (Received January 18, 2016)