

Bessenrodt, Christine; Olsson, Jørn B.

Weights of partitions and character zeros. (English) Zbl 1068.20011

Electron. J. Comb. 11, No. 2, Research paper R5, 13 p. (2004).

Summary: We classify partitions which are of maximal p -weight for all odd primes p . As a consequence, we show that any non-linear irreducible character of the symmetric and alternating groups vanishes on some element of prime order.

MSC:

[20C30](#) Representations of finite symmetric groups
[05A17](#) Combinatorial aspects of partitions of integers
[05E10](#) Combinatorial aspects of representation theory

Cited in **3** Documents

Keywords:

partitions of maximal weight; non-linear irreducible characters; symmetric groups; alternating groups

Full Text: [EMIS](#) [EuDML](#)