Jorn Olsson and Dennis Stanton\* (stanton@math.umn.edu), School of Mathematics, University of Minnesota, 206 Church St SE, Minneapolis, MN 55455. *Block inclusions and cores of partitions*. Preliminary report.

Necessary and sufficient conditions are given for an s-block of integer partitions to be contained in a t-block. The generating function for such partitions is found analytically, and also bijectively, using the notion of an (s, t)-abacus. The largest partition which is both an s-core and a t-core is explicitly given. (Received August 15, 2005)