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)

