1039-05-120 **Jerrold R. Griggs*** (j@sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *On chain partitions for quotients of the Boolean lattice.* Preliminary report.

A key ingredient of the construction of symmetric Venn diagrams for n sets, n prime, was to construct an appropriate symmetric chain decomposition of the "Necklace Poset" N_n, n prime, in which each element consists of a subset of $[n] =: \{1, \ldots, n\}$ and its cyclic rotations (G.-Killian-Savage 2004). That is, N_n is the quotient poset B_n/Z_n, consisting of orbits of the Boolean lattice B_n under the action of the cyclic group Z_n. Jordan has recently constructed such a decomposition of N_n for all integers n. We should next consider the quotient posets B_n/G for other subgroups G of the symmetric group S_n. (Received March 09, 2008)