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**William T. Trotter\*** (trotter@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. *Partitioning Subset Lattices into Intervals*. Preliminary report.

Motivated by a question involving the Stanley depth of modules, Jürgen Herzog asked us whether it is always possible to find a partition  $\mathcal{P}_n$  of the non-empty subsets of  $\{1, 2, \dots, n\}$  into intervals with  $|Y| \geq n/2$  for each interval  $[X, Y]$  in  $\mathcal{P}_n$ . We answer Herzog's question in the affirmative by first embedding it in a stronger result and then providing two elegant proofs, using entirely different methods. In this talk, we outline the first of these proofs. This is joint work with Csaba Biró, David M. Howard, Mitchel T. Keller and Stephen J. Young (Received January 30, 2009)