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**Andrew P. Dove** and **Jerrold R. Griggs\*** (j@sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *Packing Posets in the Boolean Lattice.*

Consider copies of a poset  $P$  in the family of all subsets of  $[n] := \{1, \dots, n\}$ . It remains open to determine asymptotically the largest size  $\text{La}(n, P)$  of a family of subsets of  $[n]$  that contains no subposet  $P$ , as  $n \rightarrow \infty$ . Here we consider a new packing problem, which is to maximum the number of pairwise unrelated copies of  $P$  in the Boolean lattice of all subsets of  $[n]$ . When  $P$  is a chain on  $k$  elements, and the answer is asymptotic to  $\frac{1}{2^{k-1}} \binom{n}{\lfloor n/2 \rfloor}$ , as  $n \rightarrow \infty$ , by a result of Griggs, Stahl, and Trotter. We can solve this new problem asymptotically for any  $P$ : The maximum is  $\sim \frac{1}{c(P)} \binom{n}{\lfloor n/2 \rfloor}$ , where the integer  $c(P)$  relates to embeddings of  $P$  into the Boolean lattice. This problem was independently posed and solved by Katona and Nagy. (Received July 28, 2014)