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**Cheng Yeaw Ku\*** (cyk@caltech.edu), Mail Code 253-37, California Institute of Technology, Pasadena, CA 91125, and **David Renshaw**. *Erdős-Ko-Rado Theorems for Permutations and Set Partitions*.

Let  $\text{Sym}([n])$  denote the collection of all permutations of  $[n] = \{1, \dots, n\}$ . Suppose  $\mathcal{A} \subseteq \text{Sym}([n])$  is a family of permutations such that any two of its elements have at least  $t$  cycles in common. We prove that for sufficiently large  $n$ ,  $|\mathcal{A}| \leq (n-t)!$  with equality if and only if  $\mathcal{A}$  is the stabilizer of some  $t$  points. Similarly, let  $\mathcal{B}(n)$  denote the collection of all set partitions of  $[n]$  and suppose  $\mathcal{A} \subseteq \mathcal{B}(n)$  is a family of set partitions such that any two of its elements have at least  $t$  blocks in common. Then, it is also proved that, for sufficiently large  $n$ ,  $|\mathcal{A}| \leq B(n-t)$  with equality if and only if  $\mathcal{A}$  consists of all set partitions containing some  $t$  fixed singletons, where  $B(n)$  is the  $n$ -th Bell number. (Received February 22, 2007)