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Cheng Yeaw Ku* (cyk@caltech.edu), MC 253-37 Sloan, California Institute of Tech, 1200 E. California Blvd, Pasadena, CA 91125. *Erdos-Ko-Rado for permutations and set partitions.*

Let $Sym([n])$ denote the collection of all permutations of $[n] = \{1, \dots, n\}$. Suppose $\mathcal{A} \subseteq Sym([n])$ 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 27, 2008)