1123-05-251 **Michael H Albert**, **Jay Pantone*** (jay.pantone@gmail.com) and **Vincent Vatter**. *On the Growth of Merges and Staircases of Permutation Classes.*

There is a well-known upper bound on the growth rate of the merge of two permutation classes. Curiously, there is no known merge for which this bound is not achieved. Using staircases of permutation classes, we provide sufficient conditions for this upper bound to be achieved. In particular, our results apply to all merges of principal permutation classes. We end by demonstrating how our techniques can be used to reprove a result of Bóna. (Received August 28, 2016)