1044-60-173   **Jerzy Szulga*** (`szulgje@auburn.edu`), Department of Mathematics and Statistics, Auburn University, Auburn, AL 36849. *Random clusters and selfdecomposability.*

A clustering effect of a random point process is modeled using classical Loève's semi-selfdecomposable distributions. In particular, the question of the selfdecomposability of a convex hull (or mixture) of exponential laws is investigated. For example, if the support of the mixing distribution is contained in an interval $[m, M] \subset (0, \infty)$, then there is an absolute constant $H \approx 8$ such the mixture is semi-selfdecomposable if and only if $M \leq Hm$. (Received August 31, 2008)