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**Zaoli Chen** and **Gennady Samorodnitsky\*** (gs18@cornell.edu), School of Operations Research, and Information Engineering, Ithaca, NY 14850. *Extremal clustering under moderate long range dependence and moderately heavy tails.*

We study clustering of the extremes in a stationary sequence with subexponential tails in the maximum domain of attraction of the Gumbel distribution. We obtain functional limit theorems in the space  $D[0, \infty)$  and in the space of random sup-measures. The limits have the Gumbel distribution if the memory is only moderately long. However, as our results demonstrate rather strikingly, the “heuristic of a single big jump” could fail even in a moderately long range dependence setting. As the tails become lighter, the extremal behavior of a stationary process may depend on multiple large values of the driving noise. (Received January 28, 2020)