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X. Bresson, T. Laurent, D. Uminsky and J. von Brecht* (jub@math.ucla.edu). *Multiclass Total Variation Clustering.*

Ideas from the image processing literature have recently motivated a new set of clustering algorithms that rely on the concept of total variation. While these algorithms perform well for bi-partitioning tasks, their recursive extensions yield unimpressive results for multiclass clustering tasks. We present a general framework for multiclass total variation clustering that does not rely on recursion. The results greatly outperform previous total variation algorithms and compare well with state-of-the-art NMF approaches. (Received September 09, 2013)