

1156-52-51

Valeriu Soltan* (vsoltan@gmu.edu), George Mason University, Department of Mathematical Sciences, 4400 University Drive, Fairfax, VA 22030. *On M-decomposable sets*. Preliminary report.

M-predecomposable set in n dimensions is a convex set which is the sum of a compact convex set and a closed convex cone. Complementing the existing results on M -decomposable sets, we study their extreme, exposed, and asymptotic properties. Also, we consider *M-polyhedral sets* which are sums of compact convex sets and polyhedral cones and establish some characteristic properties of such sets. (Received January 05, 2020)