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Ye Luo* (luoye@math.gatech.edu), 686 Cherry Street, School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. *Tropical Convexity, Linear Systems, and General Reduced Divisors.*

We introduce a theory of tropical convexity to continuous functions over Borel measure spaces. We apply this theory to investigate the linear systems on metric graphs (tropical curves). In particular, we extend the conventional notion of reduced divisors and propose a general one, which provides strong tools to study the properties of tropical convexity. (Received September 25, 2012)