1139-37-117   **Marc Carnovale*** (`carnovale.2@osu.edu`), 231 West 18th Ave, Columbus, Oh 43210, Columbus, OH 43210. *Gowers-Host-Kra norms and Euclidean harmonic analysis.*

As the field of additive combinatorics has matured it has seen a number of striking applications both within combinatorial number theory and without. In this talk we will survey some developments at the interface between Euclidean harmonic analysis and the fine arithmetic properties of functions controlled by the Gowers-Host-Kra norms and related data. (Received February 05, 2018)

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