1138-42-394 Michael C. Northington V and Josiah Park* (jpark685@gatech.edu). Finite Balian-Low Theorems in Higher Dimensions. Preliminary report.

We study Balian-Low type theorems for finite systems in Euclidean spaces of dimension greater than one. Our results are generalizations of S. Nitzan and J.-F. Olsen's recent work and show that a quantity closely related to the Balian-Low Theorem has the same asymptotic growth rate, $O(\log N)$ for each dimension d. Joint work with Michael Northington V. (Received February 13, 2018)