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Malabika Pramanik* (malabika@math.ubc.ca). *Point configurations in sparse sets.*

When does a Lebesgue-null set in Euclidean space contain an affine copy of a finite point configuration? The answer, not surprisingly, is when the set has large size, measured in terms of dimension. What is remarkable is that the answers turn out to be quite different depending on the notion of dimension used. I will give a survey of the literature based on this theme, and discuss joint work in part with Vince Chan, Allan Greenleaf, Kevin Henriot, Alex Iosevich and Izabella Laba. (Received September 15, 2015)