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**Brian D Cook** (bcook@math.wisc.edu), **Akos Magyar\*** (amagyar@uga.edu) and **Tatchai Titichetrakun** (tatchai@math.ubc.ca). *Configurations in dense subsets of  $P^d$ .*

Let  $A$  be a subset of the prime lattice  $P^d$  of positive relative upper density. We prove that the set  $A$  contains infinitely many affine copies of any finite set  $F$  of lattice points, that is sets of the form  $F' = x + tF$ . Our approach is based on the extension of the proof of the hypergraph removal lemma to weighted hypergraphs, with weights possibly attached to any edge. The proof exploits the pseudo-randomness properties of the weights, expressed by the so-called linear forms conditions of Green and Tao.

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