

Abstract Submitted  
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**Tuning magnetic frustration of nanomagnets in triangular-lattice geometry**<sup>1</sup> X. KE, J. LI, S. ZHANG, C. NISOLI, V. CRESPI, P. SCHIFFER, The Pennsylvania State University — We study the configuration of magnetic moments on triangular lattices of single-domain ferromagnetic islands, examining the consequences of magnetostatic interactions in this frustrated geometry. By varying the island-island distance along one direction, we are able to tune the ratio of different interactions between neighboring islands, resulting in a corresponding variation in the local correlations between the island moments. Unlike other artificial frustrated magnets, this lattice geometry displays regions of ordered moment orientation, possibly resulting from a higher degree of anisotropy leading to a reduced level of frustration. Reference: X. Ke *et al.*, Appl. Phys. Lett., in press (2008).

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