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Zero average and net flows of vortices in hybrid nanostructures with asymmetric pinning potentials[1] JOSE L. VICENT, Universidad Complutense and IMDEA-Nanociencia (Madrid), DAVID PEREZ DE LARA, IMDEA-Nanociencia and Universidad Complutense (Madrid), ALICIA GOMEZ, FERNANDO GALVEZ, Universidad Complutense (Madrid), MIGUEL A. GARCIA, CSIC and IMDEA-Nanociencia (Madrid), ELVIRA M. GONZALEZ, Universidad Complutense (Madrid) — We have fabricated hybrid nanostructures with superconducting film on top of an array of magnetic nanotriangles. In these structures, non-zero DC and AC voltages (V_{DC}, V_{AC}) are generated by alternating currents injected in the hybrid device. The $V_{DC}$and V_{AC} behaviors give us an overall picture of the vortex dynamics and the rectification effects in these superconducting devices.

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