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Local injection of pure spin current generates electric current vortices[1] YAROSLAW BAZALIY, University of South Carolina, REVAZ RAMAZASHVILI, Laboratoire de Physique Theorique, Universite Paul Sabatier — We show that local injection of pure spin current into an electrically disconnected ferromagnetic–normal-metal sandwich induces electric currents, that run along closed loops inside the device, and are powered by the source of the spin injection. Such electric currents may significantly modify voltage distribution in spin-injection devices and induce long-range tails of spin accumulation.(Preprint at arXiv:1607.06385)

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