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Ferromagnet dynamics in a driven spin valve JOERN N. KUPFERSCHMIDT, SHAFFIQUE ADAM, PIET W. BROUWER, Laboratory of Atomic and Solid State Physics, Cornell University, Ithaca, NY, 14853 — The magnetoresistance of a ferromagnet/normal-metal/ferromagnet trilayer depends on the relative orientation of the two magnetic moments. We analyze out-of-plane precession of the magnetization for a soft ferromagnetic layer in such a geometry, where the system is driven by an alternating charge current. We consider the effect of both spin-torque and spin-pumping on the magnetization dynamics and find that these have signatures in the magnetoresistance.

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