

Abstract Submitted  
for the MAR11 Meeting of  
The American Physical Society

**Spin-transfer oscillators in the effective planar approximation<sup>1</sup>**

YA. B. BAZALIY<sup>2</sup>, University of South Carolina — Spintronic devices with dominating easy plane anisotropy can be described in an effective planar approximation of the LLG equation. In particular, the effective equation can be used to study the spin-transfer oscillators. We use this approach to study the transitions of the oscillator excited by a combination of an AC and a DC electric currents between the small and large amplitude regimes.

<sup>1</sup>supported by NSF DMR-0847159

<sup>2</sup>also at the Institute of Magnetism, Kyiv, Ukraine

Ya. B. Bazaliy  
University of South Carolina

Date submitted: 19 Nov 2010

Electronic form version 1.4