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Planar approximation for spin-transfer devices with tilted polarizer[1] YA. B. BAZALIY, University of South Carolina — Planar spin-transfer devices with dominating easy-plane anisotropy can be described by an effective one-dimensional equation for the in-plane angle [1-3]. Such a description provides an intuitive qualitative understanding of the magnetic dynamics. We apply the effective planar equation to describe magnetic switching and precession states in devices with a tilted polarizer [4]. The approach allows one to understand the dynamic regimes and sketch the switching diagram without pefroming the detailed calculations.

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Ya. B. Bazaliy
University of South Carolina

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