## Erratum: Current-induced order parameter dynamics: Microscopic theory applied to Co/Cu/Co spin valves [Phys. Rev. B 76, 024404 (2007)]

P. M. Haney, D. Waldron, R. A. Duine, A. S. Núñez, H. Guo, and A. H. MacDonald (Received 18 January 2008; published 14 February 2008)

DOI: 10.1103/PhysRevB.77.059901 PACS number(s): 85.75.-d, 71.15.Mb, 72.25.Ba, 99.10.Cd

An extra factor of  $\frac{1}{2}$  runs through the derivation of  $\tilde{S}$  in Sec. (II) and Sec. (III). The affected equations are Eqs. (4), (5), (12), (14), (15), and (19); the right-hand side of each equation contains an extra factor of  $\frac{1}{2}$ . The correct final expression for the torque per current [Eq. (19)] reads:

$$\frac{\vec{S}}{I} = \frac{\mu_B}{e} \frac{\int dk_\parallel \sum (\vec{\Delta}_{cond(\alpha,\beta)} \times \vec{m}_{tr(\beta,\alpha)})}{\sum \int dk_\parallel T_{\sigma,\sigma}(\epsilon_F)}.$$
 (1)

There is no change to the ensuing data, as the correct expression was used in generating the data.

We would furthermore like to make a clarification regarding the transverse spin density decay length. We consider the decay of the torque away from the interface, which is due to differential spin precession of transverse scattering channels (see our Fig. 5). We compare this decay with that found in Ref. 1, which utilizes a diffusive approach. A more relevant comparison to be made is with Ref. 2, which like our work utilizes *ab initio* techniques. We find good qualitative agreement with Ref. 2 with regard to the decay of torque away from the interface (see Fig. 4 of Ref. 2).

<sup>&</sup>lt;sup>1</sup>J. Zhang and P. M. Levy, Phys. Rev. B **71**, 184426 (2005).

<sup>&</sup>lt;sup>2</sup>M. Zwierzycki, Y. Tserkovnyak, P. J. Kelly, A. Brataas, and G. E. W. Bauer, Phys. Rev. B 71, 064420 (2005).