Erratum: Implementation of Cavity Squeezing of a Collective Atomic Spin

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Equation (1) understates the photon shot noise inside the optical resonator by a factor of 2. It should read

$$\Delta S_y^2 = \frac{S^2}{2} + \frac{S_0}{4} - \frac{S^2}{2} - \frac{S_0}{4} \left(1 - 2\gamma \frac{Q}{S_0}\right)e^{-\xi^2 Q^2 / S_0},$$

where the ratio of total intracavity intensity fluctuations to photon shot noise should be $\gamma = 1 + \Delta p_f^2 / p_0 = 1 + Q / 74$. The experimental results, including the demonstrated squeezing, are unaffected by this correction to the model. The model predictions change by 31% at most for our experimental parameters, and remain in good agreement with the data.