Erratum: Macroscopic quantum fluctuations in noise-sustained optical patterns [Phys. Rev. A 65, 023813 (2002)]

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During the production process, some typing errors were introduced in the paper.

(i) On page 023813-2, three lines after Eq. (7), the linearized equations for the signal and pump fluctuations should be

$$\delta A_i(\vec{x},t)=A_i(\vec{x},t)-A_i^s\sim \quad (i=0,1),$$

and six lines after Eq. (7), perturbations have the form

$$\exp[i\vec{k}\cdot x+\lambda(\vec{k})t].$$

(ii) Equation (10) should be

$$e^{i\Phi_\pm(\vec{k})}=\mp\frac{i\Delta_1+2i|\vec{k}|^2\mp\sqrt{|A_0^s|^2-(\Delta_1+2|\vec{k}|^2)^2}}{A_0^s}.$$

(iii) Equations (12) and (13) should be

$$\partial_1\hat{A}_0(\vec{x},t)=-\gamma_0[1+i\Delta_0-ia_0\nabla^2]\hat{A}_0(\vec{x},t)-\frac{g}{2}\hat{A}_1^2(\vec{x},t)+E_0(\vec{x})+\hat{F}_0, \tag{12}$$

$$\partial_1\hat{A}_1(\vec{x},t)=-\gamma_1[1+i\Delta_1-ia_1\nabla^2-\partial_y]\hat{A}_1(\vec{x},t)+g\hat{A}_0(\vec{x},t)\hat{A}_1^\dagger(\vec{x},t)+\hat{F}_1, \tag{13}$$

(iv) The drift term in the Hamitonian on page 023813-4 should be

$$i\gamma_1 v\hat{A}_1^\dagger(\vec{x})\partial_y\hat{A}_1(\vec{x}).$$

(v) Equations (17) should be

$$\partial_t\mathcal{A}_0(\vec{x},t)=-\gamma_0[(1+i\Delta_0)-ia_0\nabla^2]\mathcal{A}_0(\vec{x},t)-\frac{g}{2}a_1^2(\vec{x},t)+E_0(\vec{x}).$$

(vi) Equation (14) should read

$$\langle\hat{F}_i(\vec{x},t)\hat{F}_j^\dagger(\vec{x}',t')\rangle=2\gamma_i\delta_{ij}\delta(\vec{x}-\vec{x}')\delta(t-t').$$

(vii) Equation (15) should read

$$\frac{\partial\hat{\rho}}{\partial t}=\frac{1}{i\hbar}[\hat{H},\hat{\rho}]+\Lambda\hat{\rho}.$$

(viii) Also on page 023813-4, the Liouvillian should be

$$\Lambda\hat{\rho}=\sum_{j=0,1}\int d^2\vec{x}\,\gamma_j\{[\hat{A}_j(\vec{x}),\hat{\rho}\hat{A}_j^\dagger(\vec{x})]+[\hat{A}_j(\vec{x})\hat{\rho},\hat{A}_j^\dagger(\vec{x})]\}.$$

(ix) In the first paragraph of page 023813-7 the variable $\Phi_\pm$ was wrongly quoted as $\Phi\pm$ and $\Phi_\perp$. The correct sentence is: "In fact, due to the symmetry $\omega(k)=-\omega(-k)$ we have $V_\pm(\vec{k},-\vec{k})=e^{i\omega(k)t}[e^{i\Phi_\pm}\delta A_1'(\vec{k})\pm\delta A_1'^*(-\vec{k})]$, so that the relative phase $e^{i\Phi_\pm}$ between ...."

