Elgin and Sarkar Respond: In our work, we proposed a model[1,2] incorporating quantum fluctuations into the Maxwell-Bloch equations, which describe laser evolution. An analysis of the model showed that for fluctuations sufficiently small a strange attractor remained, while as the fluctuation strength was increased limit-cycle behavior first appeared, and then fixed-point behavior. In the Comment of Graham, it is claimed that only the latter behavior should survive in a rigorous treatment of the master equation used by us. A theorem due to Frigerio[3] was quoted in order to demonstrate this. As far as we understand this theorem, it requires the *a priori* existence of a stationary state, and moreover is discussed by Frigerio and by Spohn[4] in the context of bounded operators only appearing in the master equation. In our master equation there appear photon annihilation and creator operators, which are not bounded. However, as also stated by Graham, it is relevant to inquire about the nature of the decorrelation approximation used by us. Using an exact solution for the laser equations due to Dohm,[5] we have examined[6] the semiquantum[7] factorization $\langle \hat{a}^\dagger \hat{a} R_3 \rangle \sim \langle \hat{a}^\dagger \hat{a} \rangle \langle R_3 \rangle$, and found that this exact solution suggests a modification $\langle \hat{a}^\dagger \hat{a} R_3 \rangle \sim \beta \langle \hat{a}^\dagger \hat{a} \rangle \langle R_3 \rangle$, where β is a real parameter that depends on pump power and is larger than 1.6 for values used in Ref. 2. This modifies only the equation for U such that a term $x^2(r-z)$ is introduced and the term proportional to V is multiplied by β. For large r and $\beta > 1.6$ we find fixed-point behavior. More refined analysis on these questions is in progress.

We have examined the strange attractor in the phase space of expectation values of operators. The variances are nonzero and so there is no contradiction with uncertainty-type relations. Since the correlation functions calculated are ensemble-averaged quantities, it is necessary to perform an ensemble of experiments in order to see any particularly simple behavior such as that due to fixed points. Any single experiment may see a strange-attractor–type behavior, which is compatible with experiments done so far.[8]

We would like to correct a misprint in equations (13)–(16) of Ref. 2, where there should appear ϵ' instead of ϵ, $2\epsilon'$ being defined as $2\epsilon' = 4\epsilon(R - r + 1)$.

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