

Abstract Submitted
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Generating function methods for photon counting observables

YUJUN ZHENG, FRANK L.H. BROWN, Department of Chemistry and Biochemistry, University of California, Santa Barbara, CA 93106-9510 — We recently introduced the Generalized optical Bloch Equation (GBE) framework for simulating photon counting observables from single molecule sources [Y. Zheng and F. L. H. Brown, Phys. Rev. Lett., 90, 238305(2003)]. We will present extensions to the original GBE technique that allow for extension to chromophore models more complicated than the simple model systems originally proposed. In particular, we will discuss cases involving non-Markovian stochastic dephasing of the optical transition and chromophore models that explicitly include vibrational degrees of freedom.

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