Nonlinear Optics

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1 Introduction

Nonlinear optics,

All current schemes for linear optical quantum computing rely on nonlinear effects at some point. Discrete variable computation requires single photons, a nonlinear effect is used to generate single photons. Either using heralding on a parametric process such as Spontaneous Parametric Down Conversion (SPDC) or Spontaneous Four Wave Mixing (SFWM). Non parametric nonlinear processes such as the light-matter interaction in quantum dots can also be used as a single photon source. There is no deterministic linear single photon source.

CV computation?