

Photon number noise reduction in a two-photon micromaser

M. Orszag & J. C. Retamal

Abstract

Photon number noise reduction in a two photon micromaser is obtained by reducing the fluctuations of the pump. For a regular pump statistics, it is possible to obtain a maximum reduction of 95.6% in the photon number noise, with respect to a poissonian pump, slightly above the threshold. Beyond this region, we obtain a typical photon number noise reduction of about 57%.