

A MODEL OF GENERATION  
OF PHOTON-NUMBER ENTANGLED  
STATES WITH STIMULATED  
PARAMETRIC DOWN CONVERSION

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S u m m a r y

We consider the process of generation of photon-number entangled states of light in the stimulated nonlinear parametric down conversion process and build a simple model describing the generation not involving the traditional parametric approximation. The equations of motion for the system of a pumping and a two-mode outgoing field are solved for the case of a strong correlation between two modes, and the evolution of the state parameters of the generated modes is obtained. The solution is briefly analyzed for particular types of photon-number entangled states.