2014 CAP Congress / Congrès de l'ACP 2014



Contribution ID: 115 compétition)

Type: Oral (Student, Not in Competition) / Orale (Étudiant(e), pas dans la

Mode invisibility and single-photon detetction

Monday 16 June 2014 17:00 (1 minute)

We propose a technique to probe a quantum state of light in an optical cavity without significantly perturbing the photon field. We minimize the interaction of the probe with the field by arranging a setting where the largest contribution to the transition probability is cancelled. We show that we obtain very good resolution for measuring the photon population difference between any given states the photon field by means of atomic interferometry

Author: ONUMA-KALU, Marvellous (University of Waterloo)

Co-authors: Dr MARTIN-MARTINEZ, Eduardo (Institute for Quantum Computing, University of Waterloo, Perimeter Institute for Theoretical Physics, Waterloo, Canada); Prof. MANN, Robert (University of Waterloo)

Presenter: ONUMA-KALU, Marvellous (University of Waterloo)

Session Classification: (M2-7) Ultrafast Imaging and Spectroscopy II - DAMOPC / Imagerie ultrarapide et spectroscopie II - DPAMPC

Track Classification: Division of Atomic, Molecular and Optical Physics, Canada / Division de la physique atomique, moléculaire et photonique, Canada (DAMOPC-DPAMPC)