## Abstract Submitted for the TSF12 Meeting of The American Physical Society

How to detect photons passing through interference minima LUIS GRAVE DE PERALTA, DANIEL DOMINGUEZ, APS — Surface plasmon polariton (SPP) excitations traveling in opposite directions were used to produce SPP standing waves. We show that SPP tomography in a quantum eraser arrangement has the remarkable capability of permitting the observation of light passing through the dark fringes of a standing wave interference pattern. Classical and phenomenological quantum descriptions of the experiments are presented.

Luis Grave de Peralta APS

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