

Abstract Submitted
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Double Slit Diffraction Experiments with Surface Plasmon Polaritons KAMRUL ALAM, Texas Tech University, LUIS GRAVE-DE-PERALTA, Applied Physical Society — Young's double slit experiment is the most famous interference experiment. Two parallel waveguides were used for producing interference patterns with Surface Plasmon Polaritons (SPP), which are equivalent to a double slit diffraction experiment. SPP interference was studied using SPP tomography. A series of experiments were done changing the separation and width of the waveguides. There was a good correspondence between observed and simulated interference patterns.

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