Recreating Young's Double Slit Experiment

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Abstract

I. INTRODUCTION

The double slit experiment preformed by Thomas Young was seminal because it demonstrated the wave nature of light.

II. METHODS

We used the TeachSpin Two-Slit Interference, One Photon at a Time (TWS1-B) which is a apparatus designed to perform Young's double slit experiment. The apparatus has two light sources, a 670 nm diode laser and a light bulb with a removable green light filter. There are four slit holders spaced throughout the length of the apparatus, see Figure **??**. The first slit, the source slit is Additionally we used the TeachSpin Pulse Counter / Interval Timer (PCIT1)

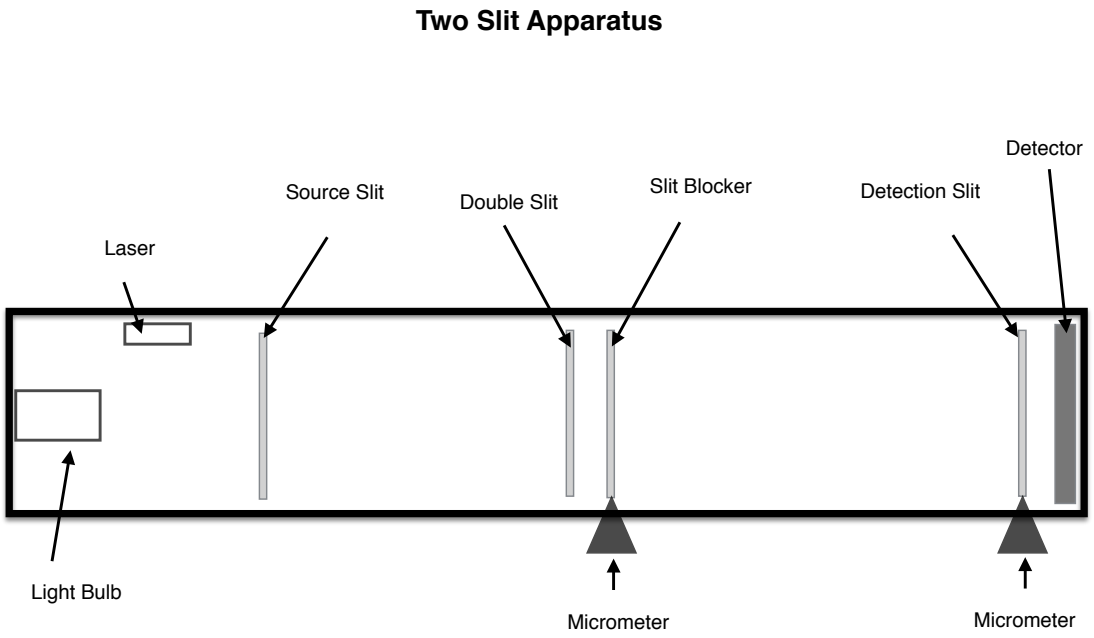

FIG. 1. The experimental set-up that we used.

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[1] Jonathan F. Reichert, *TeachSpin Instruction Manuals: Two-Slit Interference, One Photon at a Time (TWS1 - B), Pulse Counter / Interval Timer (PCIT1)* Rev. 1.0, (2013)