

Abstract Submitted
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Mapping the double-slit diffraction pattern RICHARD SELVAGGI,
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A red laser, movable double-slit, movable micrometer mounted single-slit light block,
and CCD were utilized to map out the single and double-slit diffraction patterns
between 0 and 30 millimeters. The three dimensional mapping results demonstrate
that the double-slit troughs similarly redirect the electromagnetic energy and light
particles. The measured alternating path of the electromagnetic energy and light
particles in the double-slit diffraction pattern is different than the theoretic path of
light waves defined by destructive interference and indicates that theoretical light
waves do not always have electromagnetic energy. George Monk's 1937 and Richard
Feynman's 1964 finding of conservation of electromagnetic energy in the double-slit
light experiment present the following questions: 1) What are the mass-less and
energy-less destructive interference light waves found in the double-slit troughs? 2)
What force is applied to and what energy is consumed by the work of redistributing
the electromagnetic energy and light particles in the double-slit diffraction pattern?
3) Is this unknown force and unknown energy the result of dark matter found in the
double-slit troughs?

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