

Abstract Submitted
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Scalar Potential Model of photon diffraction JOHN HODGE —

Some observations of light are inconsistent with a wave-like model. Other observations of light are inconsistent with a traditional particle-like model. A single model of light has remained a mystery. Newton's speculations, Democritus's speculations, the Bohm interpretation, and the fractal philosophy are combined with the cosmological Scalar Potential Model (SPM). The resulting model of photon structure and dynamics is tested by a toy computer experiment. The simulations included light from a distance and Young's experiment. The patterns on the screens showed diffraction wave patterns fit by the Fresnel equation. The model is consistent with the Afshar experiment and with the concepts of Bohmian mechanics.

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