

Abstract Submitted  
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**Photon diffraction** JOHN HODGE, Blue Ridge College — In current light models, a particle-like model of light is inconsistent with diffraction observations. A model of light is proposed wherein photon inferences are combined with the cosmological scalar potential model (SPM). That the photon is a surface with zero surface area in the travel direction is inferred from the Michelson-Morley experiment. That the photons in slits are mathematically treated as a linear antenna array (LAA) is inferred from the comparison of the transmission grating interference pattern and the single slit diffraction pattern. That photons induce a LAA wave into the plenum is inferred from the fractal model. Similarly, the component of the photon (the hod) is treated as a single antenna radiating a potential wave into the plenum. That photons are guided by action on the surface of the hod is inferred from the SPM. The plenum potential waves are a real field (not complex) that forms valleys, consistent with the pilot waves of the Bohm interpretation of quantum mechanics. Therefore, the Afshar experiment result is explained, supports Bohm, and falsifies Copenhagen. The papers may be viewed at <http://web.citcom.net/~scjh/>.

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