

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**History of the 3 Theories of Light** JEFFREY BOYD — Plato, Euclid, & Ptolemy said that when we see a flower, something is emitted from our eyes that travels out to apprehend the flower. The alternative was called the intromission theory: something from the flower comes into our eye, which is how we see. The latter was an unpopular minority view defended by Aristotle, Lucretius and Galen. It wasn't widely accepted until 1021 (Ibn al-Haytham's *Book of Optics*). Einstein & DeBroglie assumed the intromission theory (wave-particle duality). That was fruitful but led to quantum weirdness, Schrödinger's cat, & a sense that only mathematical formulas are "real." In 2007 PhysicsWeb said, "Quantum physics says goodbye to reality." The first hybrid emission-intromission theory was introduced by Little in 1996. Little says a wave goes out from your retina to the flower, & is followed backward by a photon. This theory has a weakness stated by Aristotle: "Then how do we see the stars?" What's the advantage of this theory? If quantum waves travel in the reverse direction from photons, then most of quantum physics can be explained without quantum weirdness or Schrödinger's cat. Quantum mathematics would be unchanged. The diffraction pattern on the screen of the double slit experiment is the same.

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Date submitted: 27 Oct 2009

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