Since I put a few notes on Geometric Optics on this site, from time to time viewers have written to me asking if I am going to write some notes on Physical Optics. The answer has always been that I was not planning to. However I have scribbled one or two notes on isolated and random topics, and I present them here. I am nowhere close to getting together a full course on Physics Optics, so for the time being I give some notes on the following random small topics. Any further topics may appear if and when the spirit moves me, at a rate of maybe one new topic every few years. I hope the following are of some interest.

- Front Matter
- 1: Reflection and Refraction via Fermat's Principle and Huygens' Construction
• 2: Reflection and Transmission at Boundaries and the Fresnel Equations

• 3: The Cornu Spiral

• 4: Stokes Parameters for Describing Polarized Light

• Back Matter

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