Physics 113 - Lecture 5

Reflection of EM Wave at Interface

Thin Film Interference

Assume near normal rays

Specific Cases:
- soap bubbles
- oil on water
- Newton’s rings
- glass plates

Phase Change | Equation
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Ray 1 | Ray 2 | 2t = mλ'  
0 | 0 | light fringe
λ/2 | 0 | dark fringe
0 | λ/2 | dark fringe
λ/2 | λ/2 | light fringe