Physically-Based Rendering of Iridescence on the GPU

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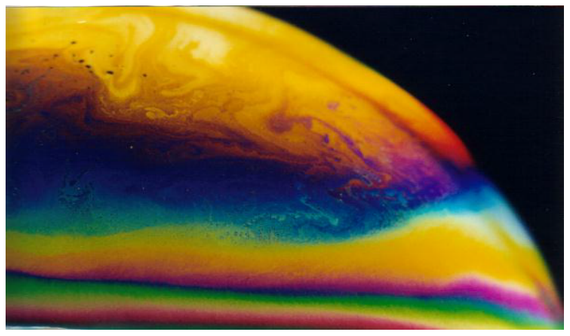
Iridescence

Interference in waves of light that cause color shift.

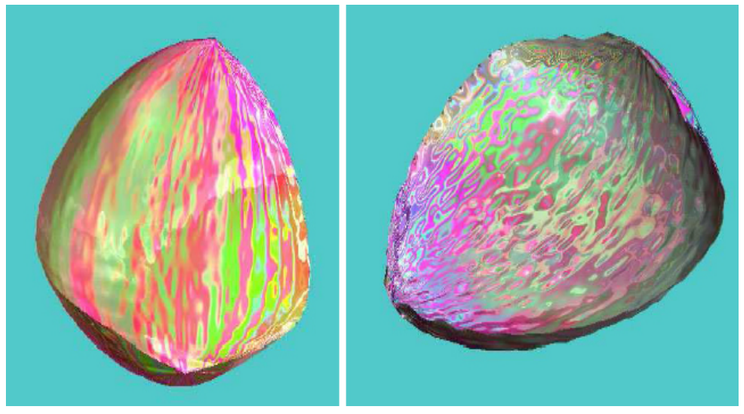


The Problem

Dependent on **wavelength**; can't do this in straight RGB!

Previous Work

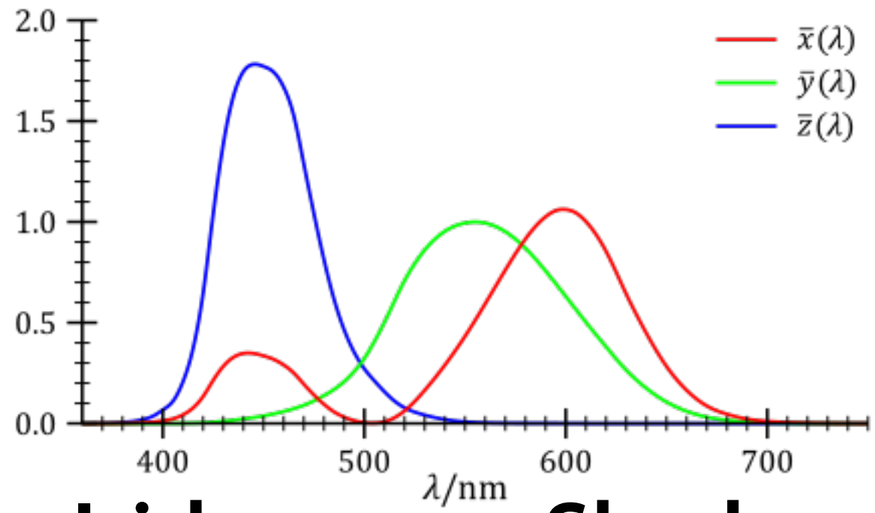
Raytraced using spectral rendering, slow on the GPU, or faked.

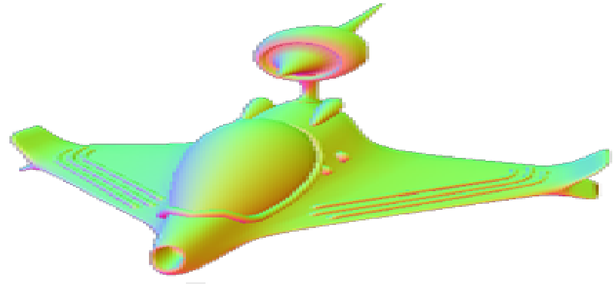


Real-Time Spectral Rendering

How do we turn RGB lights into spectral lights, then render to RGB display?

CIE Color Matching Functions



Iridescence Shader

Use normals in a pixel shader to calculate interference from spectral lights.