

Abstract Submitted
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Orbiting in Electromagnetic Scattering by a Luneburg Lens

JAMES LOCK, Physics Dept., Cleveland State University — A Luneburg lens is a sphere whose radial refractive index profile causes an incident plane wave to focus either on the sphere's back surface or somewhere inside it. Electromagnetic scattering of a plane wave by a Luneburg lens exhibits the semi-classical phenomenon of orbiting which will be examined in the context of ray theory, the physical optics model, and Mie theory.

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