

Short Research Background - An Rodriguez

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1. Short Research Background

Independent researcher, writer, and advisor, based in New York City. Licenciatura in Physics, Universidad Simón Bolívar (Venezuela). Background in interferometry and interference-based measurement.

Current research recovers electromagnetism, quantum dynamics, inertial mass, and relativistic kinematics from continuity and source-free energy flow. A recent extension derives refraction from coherent superposition of free electromagnetic fields — the theoretical ground for the present experimental proposal.

The proposal tests whether a bright Mach-Zehnder fringe exhibits a dielectric-like loading under constructive interference, via refraction at a glass boundary (binary TIR discriminator near $\theta_c \approx 48.6^\circ$) or via time-of-flight.

1.1. Selected Publications

- Light Speed as an Emergent Property of Electromagnetic Superposition
- The Maxwell Universe Research Program
- Maxwell Electromagnetism as the Minimal Dynamics of Divergence-Free Energy Flow
- Defining Electromagnetic Fields from Continuity and Divergence-Free Structure
- Deriving the Schroedinger Equation from Source-Free Maxwell Dynamics
- Geometric Inertia: Mass as Trapped Energy
- Curved Propagation vs. Curved Space

1.2. Links

- LinkedIn: <https://www.linkedin.com/in/an-rodriguez/>

- about.me: <https://about.me/anrodriguez>
- ResearchGate: <https://www.researchgate.net/profile/An-Rodriguez>
- Writing: <https://writing.preferredframe.com/prints>