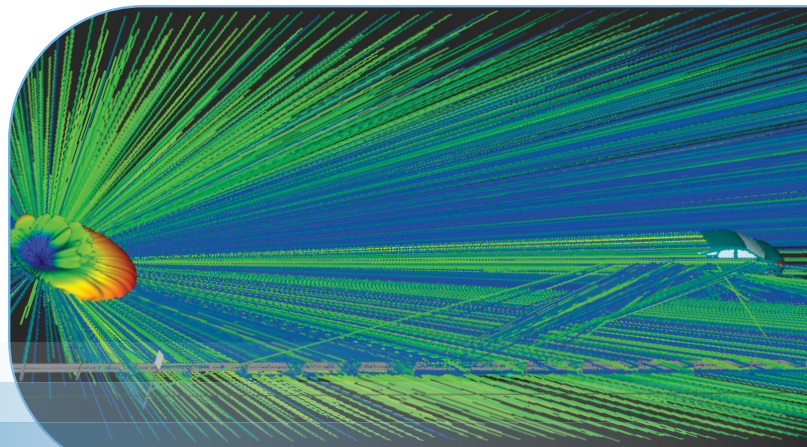


WaveFarer® Radar Simulation Software



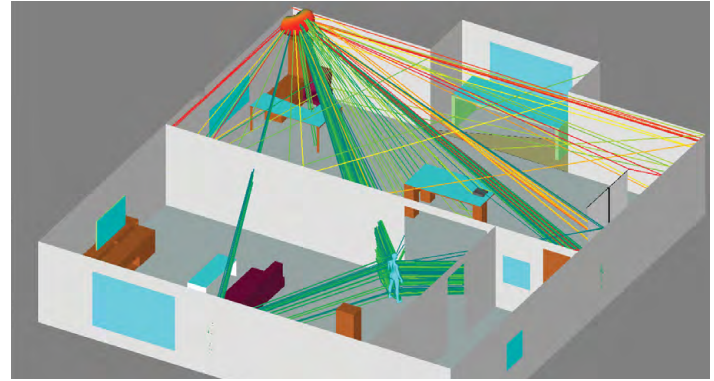
WaveFarer is a high-fidelity radar simulator that accounts for multipath and scattering from structures and vehicles in the immediate environment of a radar system as well as key atmospheric and scattering effects for frequencies up to and beyond 100 GHz. Applications include simulation of automotive drive scenarios, indoor sensors, and far-field radar cross section (RCS).

- Near-field propagation methods compute raw radar returns
- Reveals backscatter from rough surfaces on roads or structures
- Simulates chirp waveforms and range-Doppler
- Analyzes scattering within vehicle interiors or from objects behind a wall
- Transmission through materials, including windows, walls, and more



WaveFarer's Features Include:

- **Near-Field Propagation Method:** Calculate scattering off target surfaces, including multipath interactions with ground reflections, using ray-tracing algorithms and physics-based calculations.
- **Dynamic Scenario:** Apply movement to radar sensors, target vehicles, and other scatterers.
- **Targeted Ray Casting:** Efficiently produce high-fidelity returns from a target.
- **Diffuse Scattering:** Calculate contribution of scattering from rough surfaces to radar clutter.
- **Scripts for Chirp Waveforms and Range-Doppler:** Simulate chirp waveforms and post-process results to provide range-Doppler and other outputs.



Learn more at

www.remcom.com/wavefarer >>>