

Research Highlights

- Developed a hybrid Bessel-Numerov propagator for $l > 0$ scattering.
- Used Riccati-Bessel functions to eliminate initialization shocks.
- Achieved significantly improved Wronskian stability compared to naive starts.
- Validated solution proportionality and phase-shift invariance via Clojure.
- Demonstrated $O(h^6)$ convergence with increased step-size efficiency.