

Verifikasi perhitungan partial wave untuk hamburan K^+n = Partial wave calculation verification for K^+n scattering

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Abstrak

Hamburan K^+n dihitung dengan menggunakan teknik standar partial wave dan juga teknik tiga dimensi (3D). Hasil perhitungan partial wave dibandingkan terhadap hasil perhitungan 3D untuk memverifikasi konvergensi perhitungan partial wave. Observable yang dihitung yaitu penampang lintang diferensial, polarisasi, dan depolarisasi. Interaksi yang dipakai berdasarkan pertukaran meson dan hyperon sampai orde 2.

K^+n scattering is calculated by applying the standar partial wave technique and a 3D technique. The partial-wave calculations are compared to the 3D calculations in order to verify the convergence of the partial-wave calculations. The observables being calculated are differential cross section, polarization, depolarization. Interactions being used is the one based on meson and hyperon exchange up to second order.