Resonansi hyperon dalam fotoproduksi kaon pada kanal-U = Hyperon resonance in kaon photoproduction at U-channel

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Abstrak

[ABSTRAK
Dalam fotoproduksi kaon, banyak data eksperimen yang telah didapatkan namun masih sedikit teori yang dapat menjelaskan hasil tersebut dengan baik. Dengan meneliti peran resonans hyperon dalam fotoproduksi kaon, diharapkan dapat memahami reaksi ini dengan lebih baik. Penelitian ini menggunakan metode Lagrangian efektif dengan interaksi yang lebih konsisten untuk mencari nilai amplitudo hamburan, kemudian parameter yang tidak diketahui dalam amplitudo hamburan dicocokkan dengan data eksperimen dengan meminimalisasikan nilai 2=N. Data eksperimen yang digunakan ialah penampang lintang dan observabel polarisasi. Hasil yang didapatkan menunjukkan nilai yang lebih sesuai dengan data eksperimen, terutama pada daerah sudut mundur.
ABSTRACT
Kaon photoproduction has been investigated and experimented but still few theories can explain it well. Investigating hyperon resonance in kaon photoproduction may provide a better explanation about this process. This study was conducted by using an effective Langrangian method with consistent interaction to calculate scattering amplitude, then the unknown parameters in scattering amplitude would be fitted with experimental data by minimizing 2=N value. Experimental data which is used are cross-section and polarization observable. The results showed values more precise with the experimental data, especially at backward angle., Kaon photoproduction has been investigated and experimented but still few theories
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