

Model separabel untuk interaksi pion-nukleon = Separable model for pion-nukleon interaction

Asmi Susanto, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20358464&lokasi=lokal>

Abstrak

[ABSTRAK

Telah dilakukan perhitungan pergeseran fase hamburan Pion Nukleon untuk gelombang parsial S; P dan D, dan untuk isospin 1

2 dan 3

2 . Interaksi menggunakan

bentuk separabel rank-1 dan rank-2. Parameter interaksi ditentukan

melalui fitting dengan data pergeseran fase analisis SAID. Didapatkan bahwa

rank-1 dan rank-2 dapat memfit data dengan baik sampai momentum 400

MeV/c. Disamping itu, rank -2 dapat menjelaskan cukup baik sampai momentum

1200 MeV/c.

<hr>

ABSTRACT

Phaseshift of Pion-Nucleon Scattering has been calculated for the partial waves

S; P, and D, and for the isospin 1

2 and 3

2 . The interaction is assumed to

take the separable form of rank-1 and rank-2. Interaction parameters are determined

through fitting with the phaseshift data of SAID analysis. It is found

that the rank-1 and rank-2 can fit the data quite well for the momentum up

to 400 MeV/c. Meanwhile, the rank-2 can describe the data fairly well for the

momentum up to 1200 MeV/c.

Keywords : pion, nucleon,;Phaseshift of Pion-Nucleon Scattering has been calculated for the partial waves

S; P, and D, and for the isospin 1

2 and 3

2 . The interaction is assumed to

take the separable form of rank-1 and rank-2. Interaction parameters are determined

through fitting with the phaseshift data of SAID analysis. It is found

that the rank-1 and rank-2 can fit the data quite well for the momentum up

to 400 MeV/c. Meanwhile, the rank-2 can describe the data fairly well for the

momentum up to 1200 MeV/c.

Keywords : pion, nucleon,;Phaseshift of Pion-Nucleon Scattering has been calculated for the partial waves

S; P, and D, and for the isospin 1

2 and 3

2 . The interaction is assumed to

take the separable form of rank-1 and rank-2. Interaction parameters are determined through fitting with the phaseshift data of SAID analysis. It is found that the rank-1 and rank-2 can fit the data quite well for the momentum up to 400 MeV/c. Meanwhile, the rank-2 can describe the data fairly well for the momentum up to 1200 MeV/c.

Keywords : pion, nucleon,;Phaseshift of Pion-Nucleon Scattering has been calculated for the partial waves S; P, and D, and for the isospin 1
2 and 3

2 . The interaction is assumed to take the separable form of rank-1 and rank-2. Interaction parameters are determined through fitting with the phaseshift data of SAID analysis. It is found that the rank-1 and rank-2 can fit the data quite well for the momentum up to 400 MeV/c. Meanwhile, the rank-2 can describe the data fairly well for the momentum up to 1200 MeV/c.

Keywords : pion, nucleon,, Phaseshift of Pion-Nucleon Scattering has been calculated for the partial waves S; P, and D, and for the isospin 1
2 and 3

2 . The interaction is assumed to take the separable form of rank-1 and rank-2. Interaction parameters are determined through fitting with the phaseshift data of SAID analysis. It is found that the rank-1 and rank-2 can fit the data quite well for the momentum up to 400 MeV/c. Meanwhile, the rank-2 can describe the data fairly well for the momentum up to 1200 MeV/c.

Keywords : pion, nucleon,]