EXCHANGE PROCESSES IN THE DIRECT INTERACTION THEORY OF INELASTIC SCATTERING

DISSERTATION

SUPMITTED FOR THE

DEGREE OF DOCTOR OF PHILOSOPHY (SCIENCE)

OF THE

UNIVERSITY OF CALCUTTA

BY

DIPTI MITRA

SAHA INSTITUTE OF MUCLEAR PHYSICS CALCUTTA.

(**v111**)

INDEX

Sentents			ı	Page Ho.
CHAPTER I.	Sec.1.	Introduction	•••	1
	Sec.2.	Distorted wave Born approximation	•••	9
《 表》	Sec.3.	Bloch's theory	***	20
CÉAPTER II	. Sec.1.	Optical model parameters and distorted wave Born approximation	. • • •	35 1
	Sec.2.	Heavy particle stripping effect in inelastic scattering	•••	39
1900 - 19	Sec.3.	Angular correlation of Y -ray following inclastic scattering	•••	69
GHAPTER II	I.Sec.l.	Discussion of approximations to distorted wave Born approximation	•••	87
A STATE OF THE STA	Sec.2.	Conclusions	•••	93
	IA. Cel	culation of C ¹² (pp') C ^{12*} (Q = -4.43 Mev) inclastic scattering with plane waves as description of scattering states	•••	96
en e		rular momentum co-efficients and tensor operators	•••	109
\$ % \$28.	II. Rot	tation matrices	•••	118
REFERENCE	8		•••	120