

CONTENTS

LECTURES ON ELECTRON-ION COLLISIONS

Theory of electron-ion collisions	1
D.L. Moores	
Radiative capture processes in hot plasmas	23
Y. Hahn	
Electron-ion collisions in the average-configuration distorted- wave approximation	75
M.S. Pindzola et al.	
Experiments on dielectronic recombination	93
G.H. Dunn	
Experiments on electron-impact excitation and ionisation of ions	117
R.A. Phaneuf	
Electron impact excitation and ionisation of ions	
Experimentals methods	157
P. Defrance	
Dissociative recombination of molecular ions	185
J.B.A. Mitchell	
Recent developments in the theory of dissociative recombination and related processes	223
A. Giusti-Suzor	

LECTURES ON ION-ION (ATOM) COLLISIONS

Theory of charge exchange and ionisation in ion-atom (ion) collisions	239
R.K. Janev	
Electron capture in ion-atom and ion-ion collisions	271
M. Barat	
Ion-ion collisions	313
K. Dolder	
Charge exchange and ionisation in collisions between positive ions	333
K.F. Dunn	
Transfer ionisation in collisions of multiply charged ions with atoms	357
E. Salzborn and A. Muller	

LECTURES ON COLLISIONAL PROCESSES IN PLASMAS

Electron-ion and ion-ion collisions in astrophysics	403
J. Dubau	
The role of electronic and ionic collisions in Tokamak devices . .	421
M.F.A. Harrison	

SEMINARS

Cryring - A facility for atomic, molecular and nuclear physics . .	453
A. Bárány and C.H. Herrlander	
Electron impact ionisation of atomic hydrogen and helium	463
B. Piraux	
Index	491