VOLUME 2

IV. HIGH ENERGY PHYSICS		
1. The Continuum and Lattice Dirac Hamiltonian and Path		
Integration		
BE Baaquie	698	
2. Wilson's Theory of Renormalization		
B E Baaquie	729	
3. Instanton Chains with Monopole Limits		
A Chakrabarti	743	
4. Quark Mixing and CP Violation in Heavy Quark System		
L-L Chau	751	
5. Tests of QCD at PETRA		
M Chen	764	
6. Energy and Large P _T Dependent Characteristics in Charged		
Hadron Ratios		
CK Chew & TY Liang	795	
7. Improved Perturbative Computation for the Global O(N)		
Self-interacting Scalar Field Theory at Finite Temperatures		
S-P Chia & C-C Chiang	830	
8. Magnetic Symmetry and Extended QCD		
Y M Cho	841	
9. The Geometrical Model of Elastic Scattering at CERN		
Collider Energy		
T T Chou	852	

i	V
ı	Л

10.	Quantum Gauge Theories: Ghosts, Supersymmetry and Dimensional Reduction	
	R Delbourgo	859
11.	Large N Reduction and Related Ideas	
	T Eguchi	876
12.	Variation Analysis of the Hamiltonian Formulation of	
	Lattice Gauge Theories with Quarks	
1.2	S-H Guo, J-M Liu & Q-Z Chen	888
13.	Structure and Interactions of Hadrons	007
1.4	R C Hwa On Charged Multiplicity Distributions in a n and a a	896
14.	On Charged Multiplicity Distributions in α -p and α - α Collisions	
	CH Kam, Y K Lim & K K Phua	908
15.	Double-Beta Decay and Massive Neutrinos	700
	C W Kim	918
16.	The Invisible Axion and Related Topics	
	J E Kim	929
17.	Photon Structure Functions	
	W Ko	947
18.	Remarks of Diffraction Dissociation	
10	T Kobayashi	956
19.	Locally Supersymmetric Grand Unified Theory with Stable	
	Mass Hierarchy I G Koh & H Nishino	062
20	Nucleon Decay Experiment in Kolar Gold Fields	963
20.	MR Krishnaswamy et al.	987
21.	Implications of Generalized Koba-Nielsen-Olesen Scaling	707
	of Multiplicity Distributions	
	CS Lam	993
22.	Random Fields and Quantum Fields	
	S C Lim	1012
23.	The Role of Multiple Scatterings in Inclusive Reactions	
(<u>1</u>)	S-Y Lo & Y-G Li	1019
24.	Nucleon Pole Terms in Proton Decay	1000
25	BHJ McKellar WNO Seeling in Understand I and a lady and Desertions	1033
23.	KNO-Scaling in Hadron- and Lepton-Induced Reactions T-C Meng	1045
26	Nuclear Fragmentation Processes	1045
۵∪.	T-C Meng	1069
27.	Relativistic Few Quark Dynamics for Hadrons	1007
	A N Mitra	1086

	28.	Electroweak Higher-Order Effects	
		T Muta	1109
	29.	The Levison Theorem and its Generalization in Relativistic	
		Quantum Mechanics	
		G- J Ni	1111
	30.	Small Effects in Hyperon Decays	
		S Pakvasa	1135
	31.	Hadronic Interactions Observed by Cosmic Ray Experiments in the Energy Region $10^{14} - 10^{16}$ eV	
		J-R Ren, H-H Kuang, A-X Ho & L-K Ding	1145
	32.	Latest Results on Hadron Production at PETRA	
		H Rykaczewski	1153
	33.	The Thermodynamics of Yang-Mills Theory	
		H Satz	1182
	34.	The Fate of Valence Quarks in Diquark System	
		Y-S Su & E Yen	1193
	35.	Meson Dynamics in Large-N Limit	
		C-I Tan	1231
	36.	Departure from Chiral Symmetry: Role of Unitarity and	
		Analyticity	
		Tran N Truong	1248
	37.	Low P _T Physics and the Dual Parton Model	
		J Tran Thanh Van	1264
	38.	Radiative Corrections to e ⁺ e ⁻ Reactions to All Orders in	
		α Using the Renormalization Group	
		Y S Tsai	1289
	39.	Effective Lagrangian for Extended Objects	
		R Zia & G Z Zhou	1340
V.	NI	JCLEAR PHYSICS	
880 8		Electron Scattering from Light Nuclei	
		IT Cheon	1342
	2	Nuclear Spin Isospin Polarization and Spin Isospin Giant	1572
		Resonances	
		H Ejiri	1348
	3.	Exotic Nuclei and Nuclear Molecules Far from Stability	
		J H Hamilton & W Greiner	1361
	4.	Possible Core-Excitation in the Odd-Odd Nucleus 84 Rb	
	-	V Lakshminarayana, T T Neo, S M Tang & A Rajaratnam	1389
	5.	Nucleus-Nucleus Elastic Scattering at Energies up to 10 ⁴ TeV	0-5-47-5-N42-5-00-₹2
		Y-G Li & S-Y Lo	1405

6.	A Study of the Contrast between Nuclear Currents and the	
	Traditional Magnetization Current	
	C-L Lin & T W Chiu	1418
7.	Semi-Classical Methods for the Study of Heavy Ion Induced	
	Nuclear Reactions	
	K S Low, I A Jalil & B R Wong	1427
8.	Concept of "Collective Subspace" in the Nuclear Many-Body	
	Problem	
	T Marumori & F Sakata	1438
9.	Weak Interactions Studied from Beta Decay and Muon Capture	
	M Morita	1459
10.	Current Topics in High-Energy Nucleus-Nucleus Collisions	
	S Nagamiya	1473
l. S (OLID STATE PHYSICS, STATISTICAL MECHANICS AND	
R	ELATED TOPICS	
1.	A Study on the Discharge Carrier Dynamics of Stoichiometric	
	II-VI Compound (Zn _{1-x} Se _x) by the Pulsed Photoinjection	
	K-W Choi, J-J Lee, C-K Choi, K-H Kim & I-H Kim	1490
2.	Phase Transition and Crossover in Lattice Gauge Theories	
	S-H Guo, Q-Z Chen & J-M Liu	1502
3.	Evaluation of Grain Size Distribution Function for a Thin	
	Polysilicon Film Exposed to a Continuous Source	
	S C Jain, R K Sharma & R C Narula	1512
4.	Laser Spectra of Ionic Crystals	
	GDJones	1518
5	Zeros of the Partition Function and Critical Parameters	
0.	C K Majumdar	1525
6	Thermally Induced Transition from Itinerant to Local	
0.	Behaviour of Fe Moment in New Alloys RuFeSi & RuFeB	
	R G Pillay, V S Patil, A K Grover, P N Tandon & H G Devare	1542
7	Interplay of Magnetism and Superconductivity in a New	
£. s	Band Magnetic Superconductor Y ₉ Co ₇	
	B V B Sarkissian & A K Grover	1546
0	Elastic and Inelastic Gamma Ray Diffraction from Crystals	1340
ο.		1547
0	TF Smith Concrelized Scaling Property in Statistical Physics	1371
9.	Generalized Scaling Property in Statistical Physics	1554
10	M Suzuki Temperature Medulation Studies of Magnetic Materials	1334
IU.	Temperature Modulation Studies of Magnetic Materials	1562
	G V H Wilson, S J Campbell & D H Chaplin	1502

xii

11.	Theory of Inhomogeneous Systems: Applications to Metal	
	Surfaces	
	C-W Woo	1570
12.	Tight Binding Band Structure for V ₃ Si at Normal and	
	Expanded Lattice Constant	
	M Yahaya	1582
13.	Gruneisen Parameters for Anisotropic Solids	
	K Young	1602
14.	One-Dimensional Bond Percolation with Further Neighbor Bonds	
	Z Q Zhang, F C Pu & B Z Li	1605