

CONTENTS

Preface

Section I

Thermal and chemical equilibrium

<i>Probing thermalizing nuclear matter with hard photons</i> Y. Schutz	3
<i>Hadron multiplicities in high energy e^+e^-, pp and $p\bar{p}$ collisions with a statistical - thermal model</i> F. Becattini	19
<i>Phase transitions without thermodynamic limit</i> D.H.E. Gross	31
<i>The role of statistics and thermodynamics in nuclear multifragmentation</i> L.G. Moretto, et al.	43
<i>Hydrodynamic description of very high energy heavy ion collisions</i> P.V. Ruuskanen	53

Section II

Non-equilibrium dynamics

<i>Hadronic transport model with a phase transition</i> P. Danielewicz, et al.	69
<i>Baryon transport dynamics : from $p - p$ to $Pb - Pb$ collisions</i> S.E. Vance, et al.	85
<i>Semihard interactions in nuclear collisions based on a unified approach to high energy scattering</i> K. Werner, et al.	97
<i>Dynamics of the chiral phase transition</i> J. Randrup	107

<i>Filamentation instability in ultrarelativistic heavy-ion collisions</i> St. Mrówczyński	119
---	-----

Section III

Phase transitions and the critical behaviour

<i>Critical behaviour in finite temperature QCD</i> F. Karsch	131
<i>Chaos as a signature of quark - hadron phase transition</i> R.C. Hwa	147
<i>Universality of the off-equilibrium critical fragmentation</i> R. Botet	161
<i>Bose-Einstein condensation in trapped atomic gases</i> Y. Castin	173
<i>Thermodynamics and cluster content of finite excited systems of classical particles with short and long range interactions</i> J. Richert, et al.	193
<i>Percolation approach to the liquid gas phase transition - Isospin degree of freedom</i> W. Bauer	203
<i>Critical phenomena in finite systems</i> A. Bonasera	213
<i>Deuteron versus α-particle condensation and precritical pair fluctuations in low density nuclear matter</i> P. Schuck, et al.	223

Section IV

Hadronic matter and the quark - gluon plasma

<i>QCD phases at high density and instantons</i> E.V. Shuryak	237
--	-----

<i>Colour deconfinement in high energy collisions</i> H. Satz	255
--	-----

<i>The phase transition between the quark-gluon plasma and the hadronic matter : What can we learn from vector mesons?</i> C. Gerschel	277
---	-----

<i>Quark gluon plasma in A + A collisions at CERN SPS</i> M. Gaździcki	293
---	-----

<i>Chemical equilibrium in ultra-relativistic nuclear collisions</i> P. Braun-Munzinger	303
--	-----

<i>Flow phenomena as possible signals of the QCD phase transition</i> J. Stachel	305
---	-----

<i>Quark-hadron interactions in nuclear matter : Deconfinement signal</i> V.D. Toneev, et al.	309
--	-----

<i>Constraining a simple hadronization model of relativistic heavy-ion collisions using hadronic observables</i> T.J. Humanic	321
--	-----

<i>Probing chiral symmetry restoration with heavy ions</i> J. Wambach, and R. Rapp	331
---	-----

<i>Low mass dilepton production at the CERN SPS</i> A. Drees	347
---	-----

<i>Strangeness and in-medium effects in heavy-ion collisions at SIS energies</i> P. Crochet	361
--	-----

<i>Bose-Einstein condensation in multipion systems</i> A. Białas	375
---	-----

<i>Determination of emission times using two particle correlation</i> D. Ardouin	385
---	-----

Section V**Multifragmentation, liquid - gas phase transition**

<i>Boltzmann - Langevin approaches</i> Ph. Chomaz	399
<i>Liquid-gas phase transition in finite nuclei within fermionic molecular dynamics</i> H. Feldmeier, and J. Schnack	411
<i>Multifragmentation - a dynamical or a statistical process?</i> R. Nebauer, and J. Aichelin	421
<i>Multifragmentation in heavy ion reactions : Dynamical effects and thermalization</i> E. Plagnol, et al.	435
<i>The caloric curve of hot nuclei</i> U. Lynen	451
<i>Critical behavior in nuclear multifragmentation : A determination of critical exponents and the scaling function</i> J.B. Elliott	463
<i>Light particle probes of the dynamical evolution of multifragmentation reactions</i> J. Natowitz, et al.	479
<i>Cluster-cluster collisions : Fusion, phase transition and fragmentation phenomena</i> E.E.B. Campbell, et al.	493
<i>On microscopic insights into metal cluster fragmentation</i> E. Suraud, et al.	511

List of participants