

Table of Contents

Preface	ix
Opening Lecture	
A Liouville String Approach to Microscopic Time and Cosmology <i>J. Ellis, N. E. Mavromatos and D. V. Nanopoulos'</i>	3
Low-Energy Supersymmetry	
The Supersymmetric Top-Ten Lists <i>H. E. Haber</i>	27
Supersymmetry Phenomenology <i>V. Barger* and R. J. N. Phillips</i>	52
Supersymmetric Higgs Bosons at the Limit <i>S. F. King</i>	74
The Search for Supersymmetry Anomalies -Does Supersymmetry Break Itself? <i>J. A. Dixon</i>	a4
Supersymmetric Grand Unification	
Deducing $\mathcal{L}_{fermion}$ at M_{GUT} using Low-Energy Data or Towards a Theory of Fermion Masses <i>S. Raby</i>	95
Basic Results and Experimental Predictions from SUSY GUTs <i>J. L. Lopez, D. V. Nanopoulos and A. Zichich*</i>	108
Renormalization Group Study of the Minimal Supersymmetric Standard Model: No-Scale Models <i>P. Ramond</i>	128

A Fermion Mass Matrix Ansatz for the Flipped SU(5) Model <i>G. K. Leontaris</i>	150
Top Mass Predictions from Yukawa Unification <i>U. Sarid*, L. J. Hall and R. Rattazzi</i>	160
Supergravity and Model-Building	
Supergravity Basics: Models with Proton Decay and Cosmological Constraints <i>R. Arnowitt* and P. Nath</i>	173
Testing Unified Supersymmetric Models <i>S. Kelley</i>	188
The Strong CP Problem, String Theory and the Nelson-Barr Mechanism <i>R. G. Leigh</i>	205
Flavor Symmetries and the Problem of Squark Degeneracy in Supergravity Theories <i>A. L. Kagan</i>	215
The Electroweak Phase Transition in Minimal Supergravity Models <i>H. Pois</i>	228
One-Loop Constraints on Supergravity Models <i>G. T. Park</i>	239
Superstrings and Phenomenology	
Superstring and Beyond: Fractional Superstring <i>S.-H. H. Tye</i>	251
Non-Perturbative String Phenomenology <i>J. L. Lopez</i>	272
Scenarios for Superstring Unification (contribution not received) <i>V. Kaplunovsky</i>	0 0 0
Breakdown of Duality in (0,2) Superstring Models <i>J. Erler</i>	285

Classical String Solitons	295
<i>R. R. Khuri</i>	
Supercosmology	
Supersymmetry and Cosmology	307
<i>D. N. Schramm</i>	
Aspects of Neutralino Dark Matter	321
<i>K. Yuan</i>	
Experimental Prospects	
Searches for Supersymmetry at Fermilab	345
<i>J. T. White</i>	
Life in the Superworld, as Seen Through the Eyes of an Experimenter (contribution not received)	000
<i>R. Webb</i>	
Closing Remarks	
The INFN Eloisatron Project	363
<i>A. Zichichi</i>	
List of Participants	385