CONTENTS

Preface	xi
Introduction A. Zichichi	xiii
Supercolliders and Superconductivity	
Superconducting Magnets and rf Cavities for the LHC T. Taylor	1
The Large Hadron Collider: A Megascience Project P. Lebrun	11
The Eloisatron Collider: A Tentative Feasibility Study 1989 K. Johnsen	21
Possible Mechanisms of High-T _c Superconductivity C. Grimaldi	30
Rf Residual Losses, High Electric and Magnetic rf Fields in Superconducting Cavities J. Halbritter	59
Low-T _c Superconductors and Cavities	
Superconducting Cavities for Frontier Colliders H. Padamsee	80
Superconducting Magnets for Accelerators L. Rossi	106
Microwave Measurements of Superconductors Useful for Particle Accelerators A. Cassinese	123

Development and Application of Multifilamentary (Nb,Ti) ₃ Sn Wires Stabilized with High Strength CuNb Composite <u>K. Watanabe</u> and M. Motokawa	136
Development of Nb ₃ Al Conductors Having Great Potentialities in High Energy Physics K. Inoue	143
High-T _c Superconductors	
Studies on Bi-2212 and Yb-123 Tapes Fabricated by PIT Technique <u>K. Salama</u> , K. Thangaraj, S. P. Athur and A. N. Iyer	160
BSCCO-2223 Multilayered Conductors L. Martini	173
Performance of Long Length BSCCO-2223 Wire for Magnet Applications L. D. Masur and <u>J. D. Scudiere</u>	182
Industrial Fabrication and Application of Bi-2223 Superconductors <u>C. Friend</u> , D. M. Spiller, Y. B. Huang and W. W. Blendl	194
Photograph of Participants	209
List of Participants	211

х