

# Contents

Preface	vii
Acknowledgements	ix
Puff Field Theory ORI J. GANOR	1
Mottness and Strong Coupling ROBERT G. LEIGH, TING-PONG CHOY AND PHILIP PHILLIPS	15
Holographic Aspects of Generalized Electric-Magnetic Dualities ANASTASIOS C. PETKOU	31
Null and Spacelike Singularities and Gauge-Gravity Duality SUMIT R. DAS	39
Is SUSY Natural? KEITH R. DIENES, MICHAEL LENNEK, DAVID SÉNÉCHAL AND VAIBHAV WASNIK	57
Brane Induced Gravity: Codimension-2 NEMANJA KALOPEP	67
Local Bulk Operators in AdS/CFT and the Fate of the BTZ Singularity ALEX HAMILTON, DANIEL KABAT, GILAD LIFSCHYTZ AND DAVID A. LOWE	85
Heterotic Geometry and Fluxes LI-SHENG TSENG	101
On the Spectrum of Pure Yang-Mills Theory LAURENT FREIDEL, ROBERT G. LEIGH, DJORDJE MINIC AND ALEXANDR YELNIKOV	109
Resolving Black Hole Microstates VIJAY BALASUBRAMANIAN, JAN DE BOER, SHEER EL-SHOWK AND ILIES MESSAMAH	129
Geometry of Supersymmetric Type II Solutions ALESSANDRO TOMASIELLO	183

Resolving Gravitational Singularities FINN LARSEN	193
Recent developments in heterotic compactifications ERIC SHARPE	209
Worldsheet Instantons and Torsion Curves VOLKER BRAUN, MAXIMILIAN KREUZER, BURT A. OVRUT AND EMANUEL SCHEIDEGGER	231
Schedule of talks	241
List of participants	243