# 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 Kaloper** 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