

CONTENTS

Preface	v
Opening Address	vii
Workshop Organization	viii
AdS/QCD, Light-Front Holography, and the Nonperturbative Running Coupling <i>Stanley J. Brodsky, Guy de Téramond and Alexandre Deur</i>	
New Results on Non-Abelian Vortices — Further Insights into Monopole, Vortex and Confinement <i>K. Konishi</i>	17
Study on Exotic Hadrons at B -Factories <i>Toru Iijima</i>	32
Cold Compressed Baryonic Matter with Hidden Local Symmetry and Holography <i>Manrique Rho</i>	39
Aspects of Baryons in Holographic QCD <i>T. Sakai</i>	54
Nuclear Force from String Theory <i>K. Hashimoto</i>	67
Integrating Out Holographic QCD Back to Hidden Local Symmetry <i>Masayasu Harada, Shinya Matsuzaki and Koichi Yamawaki</i>	70
Holographic Heavy Quarks and the Giant Polyakov Loop <i>Gianluca Grignani, Joanna Karczmarek and Gordon W. Semenoff</i>	78
Effect of Vector–Axial-Vector Mixing to Dilepton Spectrum in Hot and/or Dense Matter <i>Masayasu Harada and Chihiro Sasaki</i>	86
Infrared Behavior of Ghost and Gluon Propagators Compatible with Color Confinement in Yang-Mills Theory with the Gribov Horizon <i>Kei-Ichi Kondo</i>	93

Chiral Symmetry Breaking on the Lattice <i>Hidekori Fukaya [for JLQCD and TWQCD Collaborations]</i>	99	Resizing Conformal Windows <i>O. Antipin and K. Tuominen</i>	247
Gauge-Higgs Unification: Stable Higgs Bosons as Cold Dark Matter <i>Yutaka Hosotani</i>	106	Nearly Conformal Gauge Theories on the Lattice <i>Zoltán Fodor, Kieran Holland, Julius Kuti, Dániel Nográdi and Chris Schroeder</i>	254
The Limits of Custodial Symmetry <i>R. Sekhar Chivukula, Roshan Foadi, Elizabeth H. Simmons and Stefano Di Chiara</i>	120	Going Beyond QCD in Lattice Gauge Theory <i>G. T. Fleming</i>	267
Higgs Searches at the Tevatron <i>Kazuhiro Yamamoto [for the CDF and DØ Collaborations]</i>	135	Phases of QCD from Small to Large N_f : (Some) Lattice Results <i>A. Deuzeman, E. Pallante and M. P. Lombardo</i>	275
The Top Triangle Moose <i>R. S. Chivukula, N. D. Christensen, B. Coleppa and E. H. Simmons</i>	143	Lattice Gauge Theory and (Quasi)-Conformal Technicolor <i>D. K. Sinclair and J. B. Kogut</i>	283
Conformal Phase Transition in QCD Like Theories and Beyond <i>V. A. Miransky</i>	150	Study of the Running Coupling Constant in 10-Flavor QCD with the Schrödinger Functional Method <i>N. Yamada, M. Hayakawa, K.-I. Ishikawa, Y. Osaki, S. Takeda and S. Uno</i>	290
Gauge-Higgs Unification at LHC <i>Nobuhito Maru and Nobuchika Okada</i>	159	Study of the Running Coupling in Twisted Polyakov Scheme <i>T. Aoyama, H. Ikeda, E. Itou, M. Kurachi, C.-J. D. Lin, H. Matsufuru, H. Ohki, T. Onogi, E. Shintani and T. Yamazaki</i>	297
$W_L W_L$ Scattering in Higgsless Models: Identifying Better Effective Theories <i>Alexander S. Belyaev, R. Sekhar Chivukula, Neil D. Christensen, Hong-Jian He, Masafumi Kurachi, Elizabeth H. Simmons and Masaharu Tanabashi</i>	166	Running Coupling in Strong Gauge Theories via the Lattice <i>Zoltán Fodor, Kieran Holland, Julius Kuti, Dániel Nográdi and Chris Schroeder</i>	304
Holographic Estimate of Muon $g - 2$ <i>Deog Ki Hong</i>	173	Higgsinoless Supersymmetry and Hidden Gravity <i>Michael L. Graesser, Ryuichiro Kitano and Masafumi Kurachi</i>	311
Gauge-Higgs Dark Matter <i>T. Yamashita</i>	180	The Latest Status of LHC and the EWSB Physics <i>S. Asai</i>	324
Topological and Curvature Effects in a Multi-Fermion Interaction Model <i>T. Inagaki and M. Hayashi</i>	184	Continuum Superpartners from Supersymmetric Unparticles <i>Hsin-Chia Cheng</i>	338
A Model of Soft Mass Generation <i>J. Hošek</i>	191	Review of Minimal Flavor Constraints for Technicolor <i>Hidekori S. Fukano and Francesco Sannino</i>	350
TeV Physics and Conformality <i>Thomas Appelquist</i>	198	Standard Model and High Energy Lorentz Violation <i>Damiano Anselmi</i>	357
Conformal Higgs, or Techni-Dilaton — Composite Higgs Near Conformality <i>Koichi Yamawaki</i>	213	Dynamical Electroweak Symmetry Breaking and Fourth Family <i>Michio Hashimoto</i>	364
Phase Diagram of Strongly Interacting Theories <i>Francesco Sannino</i>	230	Holomorphic Supersymmetric Nambu–Jona-Lasino Model and Dynamical Electroweak Symmetry Breaking <i>Dong-Won Jung, Otto C. W. Kong and Jae Sik Lee</i>	371

Ratchet Model of Baryogenesis <i>Tatsu Takeuchi, Azusa Minamizaki and Akio Sugamoto</i>	378	Thermodynamics with Unbroken Center Symmetry in Two-Flavor QCD <i>S. Takemoto, M. Harada and C. Sasaki</i>	430
Classical Solutions of Field Equations in Einstein Gauss-Bonnet Gravity <i>P. Suranyi, C. Vaz and L. C. R. Wijewardhana</i>	385	Masses of Vector Bosons in Two-Color QCD Based on the Hidden Local Symmetry <i>T. Yamaoka, M. Harada and C. Nonaka</i>	433
Black Holes Constitute All Dark Matter <i>Paul H. Frampton</i>	390	Walking Dynamics from String Duals <i>Maurizio Piai</i>	436
Electroweak Precision Test and $Z \rightarrow b\bar{b}$ in the Three Site Higgsless Model <i>Tomohiro Abe</i>	395	The Quark Mass Dependence of the Nucleon Mass in AdS/QCD <i>Hyo Chul Ahn</i>	436
Chiral Symmetry and BRST Symmetry Breaking, Quaternion Reality and the Lattice Simulation <i>Sadataka Furui</i>	398	Structure of Thermal Quasi-Fermion in QED/QCD from the Dyson-Schwinger Equation <i>Hisao Nakagawa</i>	437
Holographic Techni-Dilaton, or Conformal Higgs <i>Kazumoto Haba, Shinya Matsuzaki and Koichi Yamawaki</i>	401	Critical Behaviors of Sigma-Mode and Pion in Holographic Superconductors <i>Cheonsoo Park</i>	437
Phase Structure of Topologically Massive Gauge Theory with Fermion <i>Yuichi Hoshino</i>	404	<i>List of Participants</i>	438
New Regularization in Extra Dimensional Model and Renormalization Group Flow of the Cosmological Constant <i>Shoichi Ichinose</i>	407		
Spectral Analysis of Dense Two-Color QCD <i>T. Kanazawa, T. Wettig and N. Yamamoto</i>	412		
NJL Model with Dimensional Regularization at Finite Temperature <i>T. Fujihara, T. Inagaki, D. Kimura, H. Kohyama and A. Kvinikhidze</i>	415		
A New Method of Evaluating the Dynamical Chiral Symmetry Breaking Scale and the Chiral Restoration Temperature in General Gauge Theories by Using the Non-Perturbative Renormalization Group Analyses with General 4-Fermi Effective Interaction Space <i>Ken-Ichi Aoki, Daisuke Sato and Kazuhiko Miyashita</i>	418		
The Effective Chiral Lagrangian with Vector Mesons and Hadronic τ Decays <i>D. Kimura, Kang Young Lee, T. Morozumi and K. Nakagawa</i>	421		
Spontaneous SUSY Breaking with Anomalous $U(1)$ Symmetry in Metastable Vacua and Moduli Stabilization <i>Hiroyuki Nishino</i>	424		
A New Description of the Lattice Yang-Mills Theory and Non-Abelian Magnetic Monopole Dominance in the String Tension <i>Akihiro Shibata</i>	427		