

Publications

Kazunori Itakura

Publications in refereed journals

1. E. Ferreira, E. Iancu, K. Itakura and L. McLerran, Nuclear Physics A710 (2002) 373.
“Froissart bound from gluon saturation”
2. E. Iancu, K. Itakura and L. McLerran, Nuclear Physics A708 (2002) 327.
“Geometric Scaling above the Saturation Scale”
3. H. Abuki, T. hatsuda, and K. Itakura, Physical Review **D65** (2002) 074014.
“Structural Change of Cooper Pairs and Momentum-dependent Gap in Color Superconductivity”
4. K. Itakura and S. Maedan, Progress of Theoretical Physics **105** (2001) 537. invited paper
“Light-Front Realization of Chiral Symmetry Breaking”
5. K. Itakura, S. Maedan, Physical Review **D62** (2000) 105016.
“Dynamical Chiral Symmetry Breaking on the Light Front II. The Nambu-Jona-Lasinio Model”
6. K. Suzuki, A. Hayashigaki, K. Itakura, J. Alam, and T. Hatsuda, Physical Review **D62** (2000) 031501(R).
“Validity of the Color Dipole Approximation for Diffractive Production of Heavy Quarkonium”
7. K. Itakura and S. Maedan, Physical Review **D61** (2000) 045009.
“Dynamical Chiral Symmetry Breaking on the Light Front. DLCQ Approach”
8. K. Itakura, S. Maedan, and M. Tachibana, Physics Letter **B442** (1998) 217.
“Classical aspects of the 1+1 dimensional Abelian Higgs Model on the Light Front”
9. K. Itakura, Progress of Theoretical Physics **98** (1997) 527.
“Gap Equations from Fermionic Constraints on the Light Front”
10. K. Itakura and S. Maedan, Progress of Theoretical Physics **97** (1997) 635.
“Spontaneous Symmetry Breaking in Discretized Light-Cone Quantization”
11. K. Itakura, Physical Review **D54** (1996) 2853.
“Boson Expansion Methods in 1+1-dimensional Light-Front QCD”
12. K. Itakura and K. Ohta, Physical Review **D50** (1994) 4145.
“Quantum Hamiltonian reduction of the Schwinger model”
13. K. Itakura, M. Minowa, S. Moriyama and W. Ohtani, Nucl. Instrum. Meth. A320 (1992) 500. *“Measurement of the property of cooled Lead Molybdate as a scintillator”*

Conference Proceedings

1. “Geometric Scaling in Color Glass Condensate” (with E. Iancu and L. McLerran), proceedings of “XVI International Conference on Particles and Nuclei (PaNic02)”, (Osaka, Japan, September 30 - October 4, 2002)
2. “Structure Change of Cooper Pairs in Color Superconductivity – Crossover from BCS to BEC ? –”, hep-ph/0209081, proceedings for “the XVI International Conference on Ultrarelativistic Nucleus-Nucleus Collisions (Quark Matter2002)”, (Nantes, France, 18-24 Jul 2002).
3. “Understanding Geometric Scaling at Small x ” (with E. Iancu and L. McLerran), hep-ph/0205198, Proceedings of the conference, Rencontres de Moriond, “QCD and High Energy Hadronic Interactions” (Les Arcs, France, March 16-23, 2002)
4. ”Color Superconductivity in Dense QCD and Structure of Cooper Pairs ” (with H. Abuki and T. Hatsuda), hep-ph/0206043, proceedings of the Joint CSSM/JHF Workshop on Physics at Japan Hadron Facility (March 14-21, Adelaide, 2002)
5. “Constraints on color dipole-nucleon cross section from diffractive heavy quarkonium production,” (with K. Suzuki) Nucl. Phys. B, Proc. Suppl., **99** (2001) 230. Proceedings for DIFFRACTION2000: International Workshop on Diffraction in High-energy and Nuclear Physics, (Cetraro, Cosenza, Italy, 2-7 Sep 2000).
6. “Diffractive Physics in eRHIC,” (with K. Suzuki, A. Hayashigaki, J. Alam, and T. Hatsuda) Proceedings of “Nuclear Theory Summer Meeting on eRHIC”, (Brookhaven National Laboratory, New York, USA, 26 June - 14 July, 2000).
7. “Effects of topology on the light front,” Nucl. Phys. A, **670** (2000) 76. Proceedings of the International Symposium on Physics of Hadrons and Nuclei, (Tokyo, Japan, 14 December 1998)
8. “Dynamical Chiral Symmetry Breaking on the Light Front,” Proceedings of TMU-Yale Symposium on Dynamics of Gauge Fields, (December 13-15, 1999. International House, Tokyo Metropolitan University).
9. “Dynamical Chiral Symmetry Breaking on the Light Front,” Nucl. Phys. A **663** & **664** (2000) 1035c. Proceedings of the 15th International Conference on Particles and Nuclei (PANIC99), Uppsala, Sweden, 10 June 1999.
10. “Correlation between instantons and QCD-monopoles in the Abelian gauge,” (with H. Suganuma, H. Toki and O. Miyamura) Proceedings of International Workshop on “Nonperturbative Approaches to QCD” at ECT*, Trento, 10 - 29 July 1995. (Petersburg Nucl. Phys. Inst., 1995.)

Proceedings in domestic journals

1. "Gluon saturation from nonlinear evolution equation at small x " (with E. Iancu and L. McLerran) *Soryushiron Kenkyu* 105 (2002) D45
2. "Light-Front Quantization and Its Application –Past, Present, and Near Future–," Proceedings of the Symposium on Frontier Nuclear Physics (FRONP99) [volume JAERI-Conf 99-015]; August 2-4, 1999, JAERI, Tokai, Japan.
3. "Light-Front Quantization – A Form of Dialectic Development –," *Genshikaku Kenkyu* 42 (1998) 115 Proceedings of 1998 Summer School
4. "Boson Expansion Methods on Light Front," *Soryuushiron Kenkyu* 94 (1997) F37 Proceedings of domestic workshop on "Recent Developments in QCD and Hadron Physics" in Yukawa Institute (January 1996)
5. RIKEN Accelerator Progress Report
 - (a) "Gluon Saturation from Small- x Evolution Equation" (with Iancu and McLerran) *RIKEN Accel. Prog. Rep.* 35 (2002) 191
 - (b) "Structural Change of Cooper Pairs in Color Superconductivity" (with Abuki and Hatsuda) *RIKEN Accel. Prog. Rep.* 35 (2002) 192
 - (c) "Light-Front Realization of the Chiral Symmetry Breaking" (with Maedan) *RIKEN Accel. Prog. Rep.* 34 (2001) 285

Books

1. "Physics of Hadrons and QCD," (World Scientific, 1999) edited by Hiroyuki Yabu, Kazunori Itakura, Tetsuo Matsui, Makoto Oka. Proceedings of the APCTP-RCNP Joint International School and the 1998 YITP Workshop on the Physics of Hadrons and QCD (Osaka and Kyoto, Japan, October 12-13, 1998).