

**YITP workshop “String Theory and Quantum Field Theory”
Program (2005 Aug. 19 – 23)**

— Place: Yukawa Hall 3F Conference room —

19 (Fri)

session 1 (E) (13:40-15:15)

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|---------------------|---|
| A. Linde (Stanford) | Inflation in Stringy Landscape * (55) |
| K. Furuta (RIKEN) | Locality and Evolution of Cosmological Fluctuation (20) |

————— Break (25 min) —————

session 2 (E) (15:40-16:55)

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| A. Tsuchiya (Osaka) | Fermion Phase Space and Complex Matrix Model for Bubbling AdS Geometries (40) |
| N. Kim (Kyung Hee) | AdS ₃ Solutions of IIB Supergravity (20) |

————— Break (20 min) —————

session 3 (17:15-18:30)

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| K. Ohashi (TIT) | Global Structure of Moduli Space for BPS Walls (20) |
| M. Eto (TIT) | Worldwide Wall Web (20) |
| S. Ichinose (Shizuoka) | SUSY and GAUGE Ward-Takahashi Identities on Background Fields (20) |

The numbers in the parentheses denote length of the talks (minutes). Talks with * are the invited talks including review. Sessions with (E) are the English sessions. The speakers in the other sessions are also encouraged to speak in English.

We plan to provide a live broadcast of the talks in our homepage: <http://www2.yukawa.kyoto-u.ac.jp/~qft/>

20 (Sat)

session 1 (E) (9:00-10:35)

- R. Kallosh (Stanford) String Cosmology and the Index of the Dirac Operator * (55)
Y. Hikida (KEK) D-branes in Big Bang/Big Crunch Universes (20)

————— Break (25 min) —————

session 2 (E) (11:00-12:40)

- G. W. Semenoff (British Columbia) Nonplanar Yang-Mills vs Light-cone String Field Theory: Testing AdS/CFT for String Loops (40)
Y. Takayama (Osaka) Integrability and Higher Loops in AdS/dCFT Correspondence (20)
H. Shimada (YITP) Towards Construction of IKKT Matrix Model on $AdS_5 \times S^5$ Background (20)

————— Lunch (80 min) —————

session 3 (14:00-15:15)

- A. Miwa (Kyoto) BMN Operators from Wilson Loop (20)
T. Nagasawa (Kobe) Supersymmetry in Gauge Theories with Extra Dimensions (20)
T. Sakai (Ibaraki) QCD and Strings (20)

————— Break (25 min) —————

session 4 (15:40-16:55)

- T. Azuma (KEK) Dynamical Generation of Gauge Groups in the Massive Yang-Mills-Chern-Simons Matrix Model (20)
H. Kaneko (KEK) Stability of Fuzzy CP^2 in IIB Matrix Models (20)
S. Terashima (Rutgers) Noncommutativity and Tachyon Condensation (20)

————— Break (20 min) —————

session 5 (17:15-18:30)

- K. Hasebe (YITP) Supersymmetric Quantum Hall Effect (20)
K. Nagata (Hokkaido) $N=D=2$ Twisted Super Yang-Mills on a Lattice (20)
T. Shinohara (Chiba) Yang-Mills Theory Constructed from Cho-Faddeev-Niemi Decomposition (I) (20)
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21 (Sun)

session 1 (9:00-10:20)

- Y. Kazama (Tokyo) Covariant Quantization of Superbranes (40)
H. Okagawa (Nagoya) Wrapped Supermembrane on Vanishing 2-Torus (20)

————— Break (25 min) —————

session 2 (10:45-12:30)

- S. Moriyama (Nagoya) Boundary and Midpoint Behaviors of Lump Solutions in Vacuum String Field Theory (20)
S. Zeze (YITP) Twist Symmetry and Classical Solutions in String Field Theory (20)
I. Kishimoto (KEK) Marginal Deformations and Classical Solutions in Open Superstring Field Theory (20)
T. Suyama (Kyoto) Tachyons in Compact Spaces (20)

————— Lunch (90 min) —————

session 3 (14:00-15:35)

- Y. Imamura (Tokyo) Twistors and Perturbative QCD * (55)
S. Seki (Kyoto) Gauged Linear Sigma Model on Supermanifold (20)

Poster short talks (1 min × 12) (15:35-15:55)

————— Break (20 min) —————

Poster Session (at the front hall of the new YITP building) (16:15-18:00)

- Y. Aisaka (Tokyo) Origin of Pure Spinor Superstring
M. Irisawa (TMU) Noncommutative Geometry and Drinfel'd Twisted Symmetries
F. Katsumata (Nara Joshi) Exploring Vacuum Manifold of Open String Field Theory
H. Kihara (OCU) Scalar Laplacian on Sasaki-Einstein Manifolds $Y^{p,q}$
J. Saito (Hokkaido) Superspace Formulation of N=4 Twisted Super Yang-Mills Theory with a Central Charge
S. Sasaki (TMU) N=1/2 Supersymmetric Four-Dimensional Non-Linear Sigma-Models from Non-Anti-Commutative Superspace
K. Sato (TUS) New Formulation of Massive Spin Two Field Theory — Solution of vDVZ Discontinuity Problem
T. Murakami (Chiba) Yang-Mills Theory Constructed from Cho-Faddeev-Niemi Decomposition (2)
K. Nagao (Ibaraki) Perturbative Versus Nonperturbative Dynamics of the Fuzzy $S^2 \times S^2$
M. Hanada (Kyoto) Diffeomorphism and Local Lorentz Invariance of Matrix Model
K. Hotta (KEK) Some Solutions of Gravitational Equation Coupled with Non-BPS D9-branes
Y. Matsuo (Kyoto) Nonperturbative Effect in c=1 Noncritical String at Self-Dual Radius
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22 (Mon)

session 1 (9:00-10:35)

- K. Ohta (RIKEN) BPS State Counting and Related Physics * (55)
S. Matsuura (RIKEN) Localization on D-brane and Gauge Theory/Matrix Model (20)

————— Break (25 min) —————

session 2 (11:00-12:40)

- Y. Noma (Osaka) Gravitational Quantum Foam and Supersymmetric Gauge Theory (20)
N. Ikeda (Ritsumei) Generalized Complex Structure and Topological Field Theory (20)
T. Araki (Tohoku) Deformed Instantons in $N=1/2$ Super Yang-Mills Theory from the Super ADHM Construction (20)
T. Inami (Chuo) Central Extension of Susy Algebra on Noncommutative Superspace (20)

————— Lunch (80 min) —————

session 3 (14:00-15:15)

- K. Araki (Chuo) Certain Non-renormalization Property of SUSY Field Theories on Noncommutative Superspace (20)
Y. Kobayashi (TMU) Deformed Wess-Zumino Model on the Noncommutative Space with Grassman Number Parameters (20)
A. Sako (Keio) N.C.Supersymmetric Gauge Theories and Their Unified Perspective (20)

————— Break (25 min) —————

session 4 (15:40-16:55)

- N. Yokoi (Pisa) Dynamics of Supersymmetric $USp(2n)$ Gauge Theory on Almost Conformal Vacua (20)
Y. Ookouchi (Tokyo) Higgsin and Mesonic Deformation of ADE Type RG Fixed Points (20)
M. Sakaguchi (OIQP) Vacua of $N=2$ $U(N)$ Gauge Model in Harmonic Superspace (20)

————— Break (20 min) —————

session 5 (17:15-18:30)

- K. Takahashi (Kyoto) Flavor Structure and Coupling Selection Rule from Intersecting D-branes (20)
K. Takenaga (Osaka) Gauge-Higgs Unification at Finite Temperature (20)
T. Sakaguchi (Kyushu) Auxiliary Field Method in a Quantum Mechanical Four-Fermi Model (20)
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23 (Tue)

session 1 (9:00-10:35)

M. Kato (Tokyo)

SLE and CFT * (55)

Y. Quano (Suzuka)

Form Factors and Vertex Operators in the Eight-Vertex Model at Reflectionless Points (20)

————— Break (25 min) —————

session 2 (11:00-12:40)

H. Irie (Kyoto)

D-instanton Calculus in $(p,p+1)$ Minimal String Theory (20)

A. Yamaguchi (KEK)

On the Chemical Potential of D-instantons in $c=0$ Noncritical String Theory (20)

T. Hirayama (Toronto)

Classical Simulation of Quantum Fields (20)

N. Nakanishi (RIMS)

False Gravitational Anomalies (20)
