

**YITP workshop “Strings and Fields”
(July 22-26, 2014)**

Program

— Venue : Panasonic Hall at Yukawa Institute —

The numbers in the parentheses denote the length of the talks (minutes). Invited talks including an overview are marked with an asterisk *. We plan to provide a live broadcast of the talks in our homepage: <http://www2.yukawa.kyoto-u.ac.jp/~qft.web/>

Tuesday, July 22

Morning session 1 (10:30-11:40)

M. Taki (RIKEN) 5d SCFTs, Enhanced Symmetry and Nekrasov Partition Functions* (60)

————— Break (20 min.) —————

Morning session 2 (12:00-12:50)

A. Tanaka (Osaka U.) Superconformal index on $RP^2 \times S^1$ and mirror symmetry (20)
H.-Y. Chen (National Taiwan U.) Defects and Duality in Superconformal Indices (20)

————— Lunch (70 min.) —————

Afternoon session 1 (14:00-15:40)

Y. Yoshida (KIAS) Higgs branch localization of 3d N=2 theories (20)
T. Misumi (Keio U.) Exact Results in Supersymmetric Lattice Gauge Theories (20)
S. Banerjee (Kavli IPMU) Trace Anomaly Matching and Exact Results For Entanglement Entropy (20)
S. Sasaki (Kitasato U.) World-volume Effective Actions of Exotic Five-branes (20)

————— Break (45 min.) —————

Afternoon session 2 (16:25-18:05)

Y. Yokokura (Yukawa Inst.) An Approach to the Information Problem in a Self-consistent Model of the Black Hole Evaporation (20)
R. Yoshioka (Osaka City U.) q -Virasoro/W algebra at root of unity limit and parafermion (20)
P.-W. Kao (National Taiwan U.) Doubled D-branes in generalized geometry. (20)
T. Kimura (Tokyo Tech) Duality Transformations of Gauged Linear Sigma Model with F-term (20)

Wednesday, July 23

Morning session 1 (9:00-10:10)

G. Shiu (Hong Kong IAS / Progress in String Cosmology* (60)
Wisconsin-Madison)

————— Break (30 min.) —————

Morning session 2 (10:40-11:55)

D. Junghans (Hong Kong IAS) Brane Curvature Corrections to the N=1 Type II/F-theory Effective Action (20)
P. Soler (Hong Kong IAS) U(1) portals into hidden sectors (20)
T. Watari (Kavli IPMU) Distribution of Number of Generations (20)

————— Break (15 min.) —————

Morning session 3 (12:10-13:00)

Y. Fujimoto (Osaka U.) Operator analysis of magnetized T^2/Z_N orbifolds (20)
T. Noumi (RIKEN) Effective field theory for spacetime symmetry breaking (20)

————— Lunch (75 min.) —————

Afternoon session 1 (14:15-15:05)

Y. Ookouchi (Kyushu U.) Discrete Gauge Symmetry and Aharonov-Bohm Radiation in String Theory (20)
S. Mizoguchi (KEK) F-theory Family Unification: A new geometric mechanism for unparallel three families and large lepton-flavor mixings (20)

————— Break (20 min.) —————

Afternoon session 2 (Poster Session) (15:25-17:55)

(Presenters shown below)

Poster session 1

List of the presenters (Alphabetical order)

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| Y. Amari (Tokyo U. of Science) | Collective coordinate quantization of the CP^2 extended Skyrme-Faddeev soliton |
| F. Beye (Nagoya U.) | A Classification of Bosonic Supercurrents |
| S. Ichinose (U. of Shizuoka) | Dissipative Models and Non-equilibrium Statistical Approach |
| T. Ishii (Ritsumeikan U.) | Thermodynamic limit of the Nekrasov-type formula for E-string theory |
| H. Isono (National Tsing Hua U.) | Note on the self-duality of gauge fields in topologically nontrivial space-time |
| S. Itaya (Tokyo U. of Science) | Superconducting strings in the classical $U(1) \times U(1)$ model |
| Y. Ito (SOKENDAI) | Numerical studies on the early universe by large-scale numerical computations in the Lorentzian IIB matrix model |
| Y. Kanayama (Tokyo Tech) | Central charges in Omega-deformed N=4 super Yang-Mills theory |
| T. Katsuragawa (Nagoya U.) | Anti-evaporation in massive/bi-gravity |
| Y. Koyama (National Tsing-Hua U.) | Slow-roll inflation model from higher-dimensional gravity with a $U(1)$ gauge theory |
| S. Kuwakino (Chung Yuan Christian U.) | Discrete Flavor Symmetry in String Model |
| C. Locke (Tokyo Tech) | ODE/IM correspondence and modified affine Toda field equations |
| B. C. Lutfuoglu (Akdeniz U.) | Models inspired by Gursev model and their RG analysis |
| H. Matsuno (Tokyo Tech) | Supersymmetric backgrounds from 5d N=1 supergravity |
| A. Miwa (Nihon U.) | Quantum corrections for a string world sheet in AdS/CFT correspondence. |
| H. Mori (Osaka U.) | M5-branes and Wilson Surfaces in AdS_7/CFT_6 Correspondence |
| H. Muraki (Tohoku U.) | D-brane on Poisson manifold and Generalized Geometry |
| D. Muranaka (Nagoya U.) | The study of thermal Skyrmions in Yang-Mills theory |
| S. Nakamura (UTokyo) | Instanton counting for classical groups |
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Afternoon session 1 (14:00-15:40)

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| T. Tada (RIKEN) | Sine-Square Deformation and its Relevance to String Theory (20) |
| K. Hotta (Hokkaido U.) | Brane-Antibrane and Closed Superstrings at Finite Temperature in the Framework of Thermo Field Dynamics (20) |
| M. Ishihara (AIMR) | Glueball instability and thermalization driven by dark radiation (20) |
| H. Kitamoto (Seoul National U.) | Stochastic Dynamics of Infrared Effects in Accelerating Expanding Universe (20) |

————— Break (20 min.) —————

Afternoon session 2 (16:00-16:50)

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| Y. Igarashi (Niigata U.) | Functional Renormalization Group approach and realization of gauge symmetry in QED (20) |
| S.-I. Kumamoto (Kanazawa U.) | Weak renormalization group approach to the dynamical chiral symmetry breaking (20) |

————— Break (20 min.) —————

Afternoon session 3 (17:10-18:25)

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| M. Sakamoto (Kobe U.) | Non-renormalization theorem and cyclic Leibniz rule in lattice supersymmetry (20) |
| K. Kikuchi (Yukawa Inst.) | Supersymmetric Extension of Gradient Flow Equation (20) |
| R. Eager (Kavli IPMU) | Superconformal field theories and cyclic homology (20) |

Friday, July 25

Morning session 1 (9:00-10:10)

S. Razamat (IAS) On relations between supersymmetric theories in different dimensions* (60)

————— Break (30 min.) —————

Morning session 2 (10:40-11:30)

Y. Nakayama (Kavli IPMU) Five dimensional $O(N)$ -symmetric CFTs from conformal bootstrap (20)
T. Azeyanagi (Ecole Normale Supérieure) On Noether charge for theories with Chern-Simons terms and fluid/gravity correspondence (20)

————— Break (15 min.) —————

Morning session 3 (11:45-13:00)

S. Nishigaki (Shimane U.) Tracy-Widom distribution as instanton sum of 2D IIA superstrings (20)
S. Moriyama (Nagoya U.) Instanton Effects in Orbifold ABJM Theory (20)
S. Kawamoto (NCTS Taiwan) Exact vs. high-energy symmetries in string scattering amplitudes (20)

————— Lunch (75 min.) —————

Afternoon session 1 (14:15-15:05)

N. Ikeda (Maskawa Inst.) BV-BFV and AKSZ Formalisms of Current Algebras (20)
M. Nitta (Keio U.) Non-relativistic Nambu-Goldstone modes localized around topological solitons (20)

————— Break (20 min.) —————

Afternoon session 2 (Poster Session) (15:25-17:55)

(Presenters shown below)

Poster session 2

List of the presenters (Alphabetical order)

M. Nishida (Osaka U.)	Phase Diagram of a Holographic Superconductor Model with s-wave and d-wave
T. Nishimura (UTokyo)	Three-point functions in $\text{AdS}_5/\text{CFT}_4$ at weak coupling from integrability
T. Nosaka (Yukawa Inst.)	The Partition Function of Super Chern-Simons theories from Fermi Gas Approach
T. Numasawa (Yukawa Inst.)	Entanglement Entropy of local operator excited states in 2d RCFTs
Y. Ohara (Nagoya U.)	New model of massive spin-2 and its possible application
S. Okano (Nihon U.)	A twistorial model for massive spinning particles
A. Saito (Tokyo U. of Science)	Brane solutions of Hopf soliton in seven dimensions
Y. Sakatani (Seoul National U.)	Defect branes as Alice strings
Y. Sato (Kyoto U.)	Holographic Schwinger effect in confining theories
K. Shiraishi (Yamaguchi U.)	Spontaneous Compactification of Six-dimensional Bimetric Theory
S. Sugishita (Kyoto U.)	Holographic holes in higher dimensions
K. Takesue (Tokyo U. of Science)	Calorons and the monopole limit
Y. Tamaki (Tokyo U. of Science)	Integrable sectors of multi-vortices in the Skyrme-Faddeev type model
A. Trimm (Texas-Austin)	Tinkertoy constructions in supersymmetric gauge theory
J. Wu (NCTS Taiwan)	Quantum quench in the holographic Kondo model
F. Yagi (KIAS)	Base-Fiber Duality and Global Symmetry Enhancement
M. Yata (KEK)	Toric GLSM for ALE space
T. Yonemoto (Kyushu U.)	Radiation of Supersymmetric Particles from Aharonov-Bohm R-string
H. Yoshii (Tokyo U. of Science)	The Dirac equation in the five-dimensional AdS space-time

Saturday, July 26

Morning session 1 (9:00-10:10)

S. Das (U. of Kentucky) SCALING IN QUANTUM QUENCH : HOLOGRAPHY AND BEYOND* (60)

————— Break (20 min.) —————

Morning session 2 (10:30-11:45)

S. Shiba (Maskawa Inst.) Analysis of black branes in field theory via p-soup model (20)

C. Melby-Thompson (Kavli IPMU) Defect Holography and the Fractional Quantum Hall Effect (20)

G. Ishiki (Yukawa Inst.) Emergent bubbling geometries in gauge theories with $SU(2|4)$ symmetry (20)

————— Break (15 min.) —————

Morning session 3 (12:00-13:15)

H. Shimada (Okayama Institute for Quantum Physics) Membranes from monopole operators in ABJM theory: Large angular momentum and M-theoretic AdS4/CFT3 (20)

D. Yokoyama (Seoul National U.) Free energy from toric diagram in AdS4/CFT3 (20)

Y. Hikida (Rikkyo U.) Higher spin AdS_3 holography and superstring theory (20)

————— Lunch (70 min.) —————

Afternoon session 1 (14:25-15:40)

S. Seki (Hanyang U.) EPR = ER and Scattering (20)

M. Nozaki (Yukawa Inst.) Notes on Quantum Entanglement of Local Operators (20)

P. Caputa (Yukawa Inst.) Entanglement of Local Operators in large N CFTs (20)

————— Break (35 min.) —————

Afternoon session 2 (16:15-17:30)

S. He (Yukawa Inst.) Holographic entanglement temperature for low thermal excited states (20)

N. Shiba (Yukawa Inst.) Entanglement between two interacting CFTs and generalized holographic entanglement entropy (20)

N. Ogawa (RIKEN) Entanglement Entropy of de Sitter Space α -Vacua (20)

The end of the workshop