

KIAS-YITP joint workshop 2013 "String Theory, Black Holes and Holography", July 1-5, 2013, Yukawa Institute for Theoretical Physics (YITP), Kyoto University

## Program

### July 1st (Mon.)

9:30-10:45 Registration

Chair: Piljin Yi (KIAS)

10:50-11:00 Misao Sasaki (YITP, Kyoto) Opening Remarks

11:00-12:00 Juan Maldacena (IAS, Princeton)

"Generalized gravitational entropy and the Ryu-Takayanagi formula"

12:00-14:00 Lunch

Chair: Norihiro Iizuka (YITP, Kyoto)

14:00-15:00 Shiraz Minwalla (TIFR)

"Bose Fermi duality in Chern Simons theory coupled to a single fundamental boson and fermion"

15:00-15:30 Coffee Break

Chair: Nobuyoshi Ohta (Kinki)

15:30-16:30 Makoto Natsuume (KEK)

"The enhanced holographic superconductor: is it possible?"

16:30-17:30 Seok Kim (Seoul National)

"M5-brane indices from 5d gauge theories"

## **July 2nd (Tue.)**

**Chair: Yoichi Kazama (Komaba, Tokyo)**

**9:30-10:30 Joseph Polchinski (KITP, UCSB)**

"Gauge/Gravity Duality and the Black Hole Interior"

**10:30-11:00 Coffee Break**

**11:00-12:00 Simeon Hellerman (Kavli IPMU, Tokyo)**

"Chern-Simons-Matter Theory and its Holographic Dual"

**12:00-14:00 Lunch**

**Chair: Shin Nakamura (Nagoya)**

**14:00-15:00 Andrea Karch (UW, Seattle)**

"Diffeomorphism Invariance and Non-relativistic Holography"

**15:00-15:30 Coffee Break**

**Chair: Masafumi Fukuma (Kyoto)**

**15:30-16:30 Masaki Shigemori (Hakubi Center, YITP, Kyoto)**

"Aspects of exotic branes"

**16:30-17:30 Jaemo Park (Postech)**

"Exploration of Seiberg-like dualities in 2+1-dimensions"

## **July 3rd (Wed.)**

**Chair: Tamiaki Yoneya (Open University of Japan)**

**9:30-10:30 Steven Gubser (Princeton)**

"Finite momentum at string endpoints"

**10:30-11:00 Coffee Break**

**Chair: Satoshi Iso (KEK)**

**11:00-12:00 Akihiro Ishibashi (Kinki)**

"General relativity in AdS"

**12:00-13:00 Kimyeong Lee (KIAS)**

"The Supersymmetric M5 Brane Theories on  $R \times CP^2$ "

**13:00-14:30 Lunch**

**Chair : Kimyeong Lee (KIAS)**

**14:30-15:30 Robert Myers (Perimeter)**

"On Spacetime Entanglement"

**15:30-16:00 Coffee Break**

**Chair: Seiji Terashima (YITP, Kyoto)**

**16:00-17:00 Gong Show by poster presenters**

**17:00-18:30 Poster Viewing**

**19:00-21:00 Banquet**

## **July 4th (Thu.)**

**Chair: Misao Sasaki (YITP, Kyoto)**

**9:30-10:30 Roberto Emparan (Barcelona)**

"The large D limit of General Relativity"

**10:30-11:00 Coffee Break**

**Chair: Tadashi Takayanagi (YITP, Kyoto)**

**11:00-12:00 Thomas Faulkner (IAS, Princeton)**

"Entanglement Renyi Entropies for Disjoint Intervals in AdS/CFT"

**12:00-14:00 Lunch**

**Chair: Kazuo Hosomichi (YITP, Kyoto)**

**14:00-15:00 Piljin Yi (KIAS)**

"Quiver Scaling Regimes and Black Holes"

**15:00-15:30 Coffee Break**

**Chair: Makoto Natsuume (KEK)**

**15:30-16:30 Masanori Hanada (Hakubi Center, YITP, Kyoto)**

"Numerical test of the gauge/gravity duality: supergravity,  $\alpha'$  and  $g_s$ "

**16:30-17:30 Sungjay Lee (Chicago)**

"3d Chern-Simons Theory from M5 Branes"

## **July 5th (Fri.)**

**Chair: Tetsuya Shiromizu (Kyoto)**

**9:30-10:30 Gary Horowitz (UCSB)**

"General Relativity and the Cuprates"

**10:30-11:30 Jiro Soda (Kyoto)**

"Dynamical Instability of Lovelock AdS Black Holes"

**11:30-12:00 Coffee Break**

**Chair: Norisuke Sakai (Keio)**

**12:00-13:00 Sang-Jin Sin (Hanyang)**

"Non-spherical collapse and Early Thermalization"

**Closing of the workshop**