# Theoretical Physics at CQUeST: Past, Present, and Future

Wednesday, February 9, 2022 - Friday, February 11, 2022

Hybrid (Zoom & Sogang U)

# **Scientific Program**

### **Special Speaker**

Prof. Bum-Hoon Lee (Sogang U.)

#### **Timetable**

Feb. 9

Erick J. Weinberg (Columbia U.) Some comments on vacuum decay

V. P. Nair (City College of New York) Quantum Spaces, Entanglement and CS Forms

Manu B. Paranjape (Montreal U.) The Gravitational Interaction of a Mass in a Spatially Non-local Quantum Wave Function

Kimyeong Lee (KIAS) Discrete Gauging of 5-dim Superconformal Field Theories

Piljin Yi (KIAS) Anomalies on Tabletop

Chanju Kim (Ewha Womans U.) Supersymmetric Inhomogeneous Field Theories in 1+1 Dimensions

Nakwoo Kim (Kyung Hee U.) Holography and Wrapped Brane Solutions

Seok Kim (SNU) Microscopic entropy of AdS black holes

Changrim Ahn (Ewha Womans U.) From IR to UV

Chanyong Park (GIST) Correlation functions of magnon

#### Feb. 10

Jun'ichi Yokoyama (RESCEU, U. of Tokyo) Quest for the smallness of the primordial non-Gaussianity

Rong-Gen Cai (Beijing, Inst. Theor. Phys.) QCD phase transition and induced gravitational wave by a holographic model

Chong-Sun Chu (National Tsing-Hua U.) Conformal Boundary Condition in AdS/BCFT

Dong-han Yeom (PNU) Instantons, bubbles, and information loss paradox [Korean]

Koji Hashimoto (Kyoto U.) Chaos energy bound

Gansukh Tumurtushaa (Jeju Nat. U.) Reheating in Horndeski inflation

Bogeun Gwak (Dongguk U.) Scalar Field Scattering on Black Holes [Korean]

Hyun-Sik Jeong (Kavli ITS, UCAS) Applied Holography: Far From Home

Sang-Jin Sin (Hanyang U.) Correlation and duality in Flat Band system

Bum-Hoon Lee (Sogang U.) TBA

## Feb. 11

Xiaojian Bai (Oak Ridge National Lab.) Probing magnetic excitations using neutron scattering

Yun-Long Zhang (NAOC) Holographic Dark Fluid and Emergent Dark Universe

Sunly Khimphun (RUPP) Generalized Holographic Cosmology: Observational Constraint

Wonwoo Lee (CQUeST) Black hole, vacuum bubble, and cosmology [Korean]

Minkyoo Kim (CQUeST) A Beautiful Mind [Korean]

Imtak Jeon (APCTP) Localization and heat kernel in supersymmetric theories on AdS2 and S2

Yongjun Ahn (CQUeST) Condensed matters given by Black holes

Keun-Young Kim (GIST) Beautiful HoLography forever [Korean]

Hocheol Lee (Sogang U.) Hairy Black Holes in Dilatonic Einstein-Gauss-Bonnet Theory

Hyun Seok Yang (GIST) My Theoretical Physics with Prof. Bum-Hoon Lee [Korean]

Wontae Kim (Sogang U.) CQUeST, Physics, and Prof. B.-H. Lee [Korean]