

KEK Theory workshop 2020

Tuesday, December 15, 2020

Short talks: "Topological color-superconductivity in QCD with one flavor", Noriyuki Sogabe (KEK, Institute of Modern Physics) (3:45 PM - 4:05 PM)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
3:45-4:05PM	[29] Topological color-superconductivity in QCD with one flavor	Dr SOGABE, Noriyuki

Short talks: "Topological term, QCD anomaly, and the η' chiral soliton lattice in rotating baryonic matter", Kentaro Nishimura (Keio U.) (4:05 PM - 4:25 PM)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
4:05-4:25PM	[25] Topological term, QCD anomaly, and the η' chiral soliton lattice in rotating baryonic matter	Mr NISHIMURA, Kentaro

Short talks: "A physicist-friendly reformulation of the mod-two Atiyah-Patodi-Singer index", Yoshiyuki Matsuki (Osaka U.) (4:25 PM - 4:45 PM)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
4:25-4:45PM	[21] A physicist-friendly reformulation of the mod-two Atiyah-Patodi-Singer index	Mr MATSUKI, Yoshiyuki

Wednesday, December 16, 2020

Short talks: "Entanglement entropy in interacting field theories", Katsuta Sakai (KEK) (2:00 PM - 2:20 PM)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
2:00-2:20PM	[27] Entanglement entropy in interacting field theories	Dr SAKAI, Katsuta

Short talks: "Momentum-space entanglement in scalar field theory on the fuzzy sphere", Shoichi Kawamoto (NTHU) (2:20 PM - 2:40 PM)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
2:20-2:40PM	[14] Momentum-space entanglement in scalar field theory on the fuzzy sphere	Dr KAWAMOTO, Shoichi

Short talks: "Topological Vertex/anti-Vertex and Supergroup Gauge Theory", Yuji Sugimoto (U. of Sci. and Tech. of China) (2:40 PM - 3:00 PM)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
2:40-3:00PM	[30] Topological Vertex/anti-Vertex and Supergroup Gauge Theory	Dr SUGIMOTO, Yuji

Short talks: (A) "Non-abelian DBI Action on Magnetized Extra Dimensions", Yoshihiko Abe (Kyoto U.) (3:20 PM - 3:40 PM)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
3:20-3:40PM	[5] Non-abelian DBI Action on Magnetized Extra Dimensions	Mr ABE, Yoshihiko

Short talks: (B) "Instantons and Berry's connections on quantum graph", Inori Ueba (Kobe U.) (3:20 PM - 3:40 PM)

-Conveners: Chair: Matsuo Sato

time	[id] title	presenter
3:20-3:40PM	[32] Instantons and Berry's connections on quantum graph	Mr UEBA, Inori

Short talks: (A) "Catalytic Creation of Bubble Universe Induced by Quintessence in Five Dimensions", Issei Koga (Kyushu U.) (3:40 PM - 4:00 PM)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
3:40-4:00PM	[18] Catalytic Creation of Bubble Universe Induced by Quintessence in Five Dimensions	Mr KOGA, Issei

Short talks: (B) "Non-simply laced Lie groups and half-hypermultiplets in F-theory", Rinto Kuramochi (SOKENDAI)

(3:40 PM - 4:00 PM)

-Conveners: Chair: Matsuo Sato

time	[id] title	presenter
3:40 PM	[53] Non-simply laced Lie groups and half-hypermultiplets in F-theory	Mr KURAMOCHI, Rinto

Short talks: (A) "Restoration of chiral symmetry in cold and dense Nambu—Jona-Lasinio model with tensor renormalization group", Shinichiro Akiyama (U. of Tsukuba) (4:00 PM - 4:20 PM)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
4:00 PM	[6] Restoration of chiral symmetry in cold and dense Nambu—Jona-Lasinio model with tensor renormalization group	Mr AKIYAMA, Shinichiro

Short talks: (B) "Thermodynamics of TT-bar deformed O(N) vector model", Junichi Haruna (Kyoto U.) (4:00 PM - 4:20 PM)

-Conveners: Chair: Matsuo Sato

time	[id] title	presenter
4:00 PM	[7] Thermodynamics of TT-bar deformed O(N) vector model	Mr HARUNA, Junichi

Short talks: (A) "Complex poles of QCD propagators and their interpretation", Yui Hayashi (Chiba U.) (4:20 PM - 4:40 PM)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
4:20 PM	[9] Complex poles of QCD propagators and their interpretation	Ms HAYASHI, Yui

Short talks: (B) "Wavefunctions in dS/CFT revisited: principal series and double-trace deformations", Hoiki Liu (U. of Tokyo) (4:20 PM - 4:40 PM)

-Conveners: Chair: Matsuo Sato

time	[id] title	presenter
4:20 PM	[20] Wavefunctions in dS/CFT revisited: principal series and double-trace deformations	Ms LIU, Hoiki

Short talks: (A) "Complex Langevin analysis of four-dimensional SU(2) gauge theory with a theta term", Atis Yosprakob (SOKENDAI) (5:00 PM - 5:20 PM)

-Conveners: Chair: Masafumi Fukuma

time	[id] title	presenter
5:00 PM	[35] Complex Langevin analysis of four-dimensional SU(2) gauge theory with a theta term	Mr YOSPRAKOB, Atis

Short talks: (B) "Wilson-'t Hooft lines as transfer matrices", Toshihiro Ota (Osaka U.) (5:00 PM - 5:20 PM)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
5:00PM	[26] Wilson-'t Hooft lines as transfer matrices	Mr OTA, Toshihiro

Short talks: (A) "Partial Deconfinement at Strong Coupling on the Lattice", Hiromasa Watanabe (U. of Tsukuba)
(5:20 PM - 5:40 PM)

-Conveners: Chair: Masafumi Fukuma

time	[id] title	presenter
5:20PM	[33] Partial Deconfinement at Strong Coupling on the Lattice	Mr WATANABE, Hiromasa

Short talks: (B) "Non-perturbative Tests of Duality Cascades in Three Dimensional Supersymmetric Gauge Theories", Naotaka Kubo (YITP) (5:20 PM - 5:40 PM)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
5:20PM	[19] Non-perturbative Tests of Duality Cascades in Three Dimensional Supersymmetric Gauge Theories	Mr KUBO, Naotaka

Short talks: (A) "Space-time structure in the Lorentzian type IIB matrix model in the large-N limit", Mitsuaki Hirasawa (SOKENDAI) (5:40 PM - 6:00 PM)

-Conveners: Chair: Masafumi Fukuma

time	[id] title	presenter
5:40PM	[11] Space-time structure in the Lorentzian type IIB matrix model in the large-N limit	Mr HIRASAWA, Mitsuaki

Short talks: (B) "Superconformal index of the 6d (2,0) theory via the AdS/CFT correspondence", Shota Fujiwara (Tokyo Inst. of Tech.) (5:40 PM - 6:00 PM)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
5:40PM	[51] Superconformal index of the 6d (2,0) theory via the AdS/CFT correspondence	Mr FUJIWARA, Shota

Thursday, December 17, 2020

Short talks: "JT gravity and the asymptotic Weil-Petersson volume", Yusuke Kimura (KEK) (2:00 PM - 2:20 PM)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
2:00PM	[16] JT gravity and the asymptotic Weil-Petersson volume	Dr KIMURA, Yusuke

Short talks: "Pole-skipping of scalar and vector fields in hyperbolic space", Mitsuhiro Nishida (Gwangju Inst. of Sci. and Tech.) (2:20 PM - 2:40 PM)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
2:20PM	[24] Pole-skipping of scalar and vector fields in hyperbolic space	Dr NISHIDA, Mitsuhiro

Short talks: "Current Driven Tricritical Point in Large-Nc Gauge Theory", Shin Nakamura (Chuo U.) (2:40 PM - 3:00 PM)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
2:40PM	[23] Current Driven Tricritical Point in Large- Nc Gauge Theory	Prof. NAKAMURA, Shin

Short talks: "Implications of the weak gravity conjecture in anomalous quiver gauge theories", Tetsutaro Higaki (Keio U.) (3:20 PM - 3:40 PM)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
3:20PM	[10] Implications of the weak gravity conjecture in anomalous quiver gauge theories	Dr HIGAKI, Tetsutaro

Short talks: "The effects of fermions in the complex Langevin simulation of the Lorentzian type IIB matrix model", Kohta Hatakeyama (KEK) (3:40 PM - 4:00 PM)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
3:40PM	[8] The effects of fermions in the complex Langevin simulation of the Lorentzian type IIB matrix model	Dr HATAKEYAMA, Kohta

Short talks: "Can QCD Axion explain the CMB anisotropy?", Kiyoharu Kawana (SNU) (4:00 PM - 4:20 PM)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
4:00PM	[15] Can QCD Axion explain the CMB anisotropy?	Dr KAWANA, Kiyoharu

Short talks: "Curvature perturbation and Anomaly explains dark energy", Yoshihisa Kitazawa (KEK) (4:20 PM - 4:40 PM)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
4:20-4:40 PM	[17] Curvature perturbation and Anomaly explains dark energy	Prof. KITAZAWA, Yoshihisa

Short talks: "Classical Statistical simulation of Quantum Field Theory", Takayuki Hirayama (Chubu U.) (5:00 PM - 5:20 PM)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
5:00-5:20 PM	[12] Classical Statistical simulation of Quantum Field Theory	Prof. HIRAYAMA, Takayuki

Short talks: "Relativistic fluid dynamics for spin polarization", Rajeev Singh (Inst. of Nucl. Phys. Polish Academy of Sciences) (5:20 PM - 5:40 PM)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
5:20-5:40 PM	[28] Relativistic fluid dynamics for spin polarization.	Mr SINGH, Rajeev

Short talks: "Applications of the twisted boson theory and linear response theory to XXZ chain", Yoshiki Fukusumi (Zagreb U.) (5:40 PM - 6:00 PM)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
5:40-6:00 PM	[52] Applications of the twisted boson theory and linear response theory to XXZ chain	Dr FUKUSUMI, Yoshiki

Friday, December 18, 2020

Short talks: "Islands in Schwarzschild black holes", Yoshinori Matsuo (Osaka U.) (5:00 PM - 5:20 PM)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
5:00PM	[22] Islands in Schwarzschild black holes	Dr MATSUO, Yoshinori

Short talks: "Holographic Moving Mirror and Page Curve", Zixia Wei (YITP) (5:20 PM - 5:40 PM)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
5:20PM	[34] Holographic Moving Mirror and Page Curve	Mr WEI, Zixia

Short talks: "KdV-charged black holes", Sotaro Sugishita (KEK) (5:40 PM - 6:00 PM)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
5:40PM	[31] KdV-charged black holes	Dr SUGISHITA, Sotaro