

KEK Theory workshop 2020

Tuesday, 15 December 2020

Short talks: "Topological color-superconductivity in QCD with one flavor", Noriyuki Sogabe (KEK, Institute of Modern Physics) (15:45 - 16:05)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
15:45	[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.) (16:05 - 16:25)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
16:05	[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.) (16:25 - 16:45)

-Conveners: Chair: Yoshimasa Hidaka

time	[id] title	presenter
16:25	[21] A physicist-friendly reformulation of the mod-two Atiyah-Patodi-Singer index	Mr MATSUKI, Yoshiyuki

Wednesday, 16 December 2020

Short talks: "Entanglement entropy in interacting field theories", Katsuta Sakai (KEK) (14:00 - 14:20)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
14:00	[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) (14:20 - 14:40)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
14:20	[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) (14:40 - 15:00)

-Conveners: Chair: Asato Tsuchiya

time	[id] title	presenter
14:40	[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.) (15:20 - 15:40)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
15:20	[5] Non-abelian DBI Action on Magnetized Extra Dimensions	Mr ABE, Yoshihiko

Short talks: (B) "Instatons and Berry's connections on quantum graph", Inori Ueba (Kobe U.) (15:20 - 15:40)

-Conveners: Chair: Matsuo Sato

time	[id] title	presenter
15:20	[32] Instatons 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.) (15:40 - 16:00)

-Conveners: Chair: Yusuke Kimura

time	[id] title	presenter
15:40	[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)

(15:40 - 16:00)

-Conveners: Chair: Matsuo Sato

time [id] title

presenter

15:40	[53] Non-simply laced Lie groups and half-hypermultiplets in F-theory	Mr KURAMOCHI, Rinto
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Short talks: (A) "Restoration of chiral symmetry in cold and dense Nambu—Jona-Lasinio model with tensor renormalization group", Shinichiro Akiyama (U. of Tsukuba) (16:00 - 16:20)

-Conveners: Chair: Yusuke Kimura

time [id] title

presenter

16:00	[6] Restoration of chiral symmetry in cold and dense Nambu—Jona-Lasinio model with tensor renormalization group	Mr AKIYAMA, Shinichiro
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Short talks: (B) "Thermodynamics of TT-bar deformed O(N) vector model", Junichi Haruna (Kyoto U.) (16:00 - 16:20)

-Conveners: Chair: Matsuo Sato

time [id] title

presenter

16:00	[7] Thermodynamics of TT-bar deformed O(N) vector model	Mr HARUNA, Junichi
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Short talks: (A) "Complex poles of QCD propagators and their interpretation", Yui Hayashi (Chiba U.) (16:20 - 16:40)

-Conveners: Chair: Yusuke Kimura

time [id] title

presenter

16:20	[9] Complex poles of QCD propagators and their interpretation	Ms HAYASHI, Yui
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Short talks: (B) "Wavefunctions in dS/CFT revisited: principal series and double-trace deformations", Hoiki Liu (U. of Tokyo) (16:20 - 16:40)

-Conveners: Chair: Matsuo Sato

time [id] title

presenter

16:20	[20] Wavefunctions in dS/CFT revisited: principal series and double-trace deformations	Ms LIU, Hoiki
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Short talks: (A) "Complex Langevin analysis of four-dimensional SU(2) gauge theory with a theta term", Atis Yosprakob (SOKENDAI) (17:00 - 17:20)

-Conveners: Chair: Masafumi Fukuma

time [id] title

presenter

17:00	[35] Complex Langevin analysis of four-dimensional SU(2) gauge theory with a theta term	Mr YOSPRAKOB, Atis
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Short talks: (B) "Wilson-'t Hooft lines as transfer matrices", Toshihiro Ota (Osaka U.) (17:00 - 17:20)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
17:00	[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)
(17:20 - 17:40)

-Conveners: Chair: Masafumi Fukuma

time	[id] title	presenter
17:20	[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) (17:20 - 17:40)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
17:20	[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) (17:40 - 18:00)

-Conveners: Chair: Masafumi Fukuma

time	[id] title	presenter
17:40	[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.) (17:40 - 18:00)

-Conveners: Chair: Katsushi Ito

time	[id] title	presenter
17:40	[51] Superconformal index of the 6d (2,0) theory via the AdS/CFT correspondence	Mr FUJIWARA, Shota

Thursday, 17 December 2020

Short talks: "JT gravity and the asymptotic Weil-Petersson volume", Yusuke Kimura (KEK) (14:00 - 14:20)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
14:00	[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.) (14:20 - 14:40)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
14:20	[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.) (14:40 - 15:00)

-Conveners: Chair: Nobuyuki Ishibashi

time	[id] title	presenter
14:40	[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.) (15:20 - 15:40)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
15:20	[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) (15:40 - 16:00)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
15:40	[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) (16:00 - 16:20)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
16:00	[15] Can QCD Axion explain the CMB anisotropy?	Dr KAWANA, Kiyoharu

Short talks: "Curvature perturbation and Anomaly explains dark energy", Yoshihisa Kitazawa (KEK) (16:20 - 16:40)

-Conveners: Chair: Hiroshi Suzuki

time	[id] title	presenter
16:20	[17] Curvature perturbation and Anomaly explains dark energy	Prof. KITAZAWA, Yoshihisa

Short talks: "Classical Statistical simulation of Quantum Field Theory", Takayuki Hirayama (Chubu U.) (17:00 - 17:20)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
17:00	[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) (17:20 - 17:40)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
17:20	[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.) (17:40 - 18:00)

-Conveners: Chair: Hirotsugu Fujii

time	[id] title	presenter
17:40	[52] Applications of the twisted boson theory and linear response theory to XXZ chain	Dr FUKUSUMI, Yoshiki

Friday, 18 December 2020

Short talks: "Islands in Schwarzschild black holes", Yoshinori Matsuo (Osaka U.) (17:00 - 17:20)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
17:00	[22] Islands in Schwarzschild black holes	Dr MATSUO, Yoshinori

Short talks: "Holographic Moving Mirror and Page Curve", Zixia Wei (YITP) (17:20 - 17:40)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
17:20	[34] Holographic Moving Mirror and Page Curve	Mr WEI, Zixia

Short talks: "KdV-charged black holes", Sotaro Sugishita (KEK) (17:40 - 18:00)

-Conveners: Chair: Yoichi Kazama

time	[id] title	presenter
17:40	[31] KdV-charged black holes	Dr SUGISHITA, Sotaro