KEK Theory workshop 2020

Tuesday, 15 December 2020

Invited talks: "Introduction to higher form symmetries", Yoshimasa Hidaka (KEK) (09:05 - 10:35)

-Conveners: Chair: Ryo Yokokura

time [id] title presenter

09:05 [46] Introduction to higher form symmetries Prof. HIDAKA, Yoshimasa

Invited talks: "Symmetry protected topological phases and generalized (co)homology theory", Ken Shiozaki (YITP) (10:50 - 12:20)

-Conveners: Chair: Ryo Yokokura

time [id] title presenter

10:50 [48] Symmetry protected topological phases and generalized (co)homology theory

<u>Invited talks: "Higher-form symmetries and 3-group in axion electrodynamics", Ryo Yokokura (KEK)</u> (14:30 - 15:30)

-Conveners: Chair: Naoki Yamamoto

time [id] title presenter

14:30 [49] Higher-form symmetries and 3-group in axion electrodynamics Dr YOKOKURA, Ryo

Invited talks: "Higher groups and topological phases of matter", Apoorv Tiwari (U. of Zurich) (17:00 - 17:30)

-Conveners: Chair: Ryo Yokokura

time [id] title presenter

17:00 [50] Higher groups and topological phases of matter Dr TIWARI, Apoorv

Wednesday, 16 December 2020

Invited talks: "Dense QCD matter tackled by experiments, observations, and theory", Akira Ohnishi (YITP) (09:00 - 10:00)

-Conveners: Chair: Yoshio Kikukawa

time [id] title presenter

09:00[43] Dense QCD matter tackled by experiments, observations, and theory Prof. OHNISHI, Akira

Invited talks: "Exploring the QCD phase diagram with holographic models", Kouji Kashiwa (Fukuoka Inst. of Tech.) (10:20 - 11:00)

-Conveners: Chair: Yoshio Kikukawa

time [id] title presenter

10:20[44] Exploring the QCD phase diagram with holographic models Prof. KASHIWA, Kouji

Invited talks: "Color superconductivity in lattice QCD", Jun Nishimura (KEK) (11:20 - 12:00)

-Conveners: Chair: Yoshio Kikukawa

time [id] title presenter

11:20 [45] Color superconductivity in lattice QCD Prof. NISHIMURA, Jun

Thursday, 17 December 2020

<u>Invited talks: "Universes as Bigdata: from Geometry, to Physics, to Machine-Learning", Yang-Hui He (Merton Coll., U. of Oxford)</u> (09:00 - 10:00)

-Conveners: Chair: Koji Hashimoto

time [id] title presenter

09:00 [40] Universes as Bigdata: from Geometry, to Physics, to Machine-Learning Prof. HE, Yang-Hui

Invited talks: "The Topology of Data: from String Theory to Cosmology to Phases of Matter", Gary Shiu (U. of Wisconsin-Madison) (10:15 - 11:15)

-Conveners: Chair: Koji Hashimoto

time [id] title presenter

10:15 [41] The Topology of Data: from String Theory to Cosmology to Phases of Matter

Prof. SHIU, Gary

<u>Invited talks: "Hidden structures in the landscape of heterotic line bundle models", Hajime Otsuka (KEK)</u> (11:30 - 12:15)

-Conveners: Chair: Koji Hashimoto

time [id] title presenter

11:30 [42] Hidden structures in the landscape of heterotic line bundle models Dr OTSUKA, Hajime

Friday, 18 December 2020

<u>Invited talks: "Equivalence Principle, Decoupling Principle, and Information Loss Paradox", Pei-Ming Ho (NTU)</u> (09:00 - 10:00)

-Conveners: Chair: Tamiaki Yoneya

time [id] title presenter

09:00 [36] Equivalence Principle, Decoupling Principle, and Information Loss Paradox

Prof. HO, Pei-Ming

Invited talks: "Black hole as a quantum field configuration", Yuki Yokokura (RIKEN) (10:30 - 11:30)

-Conveners: Chair: Nobuyoshi Ohta

time [id] title presenter

10:30[37] Black hole as a quantum field configuration Dr YOKOKURA, Yuki

Invited talks: "Entanglement between two disjoint universes", Tomonori Ugajin (YITP) (14:00 - 15:00)

-Conveners: Chair: Takeshi Morita

time [id] title presenter

14:00 [38] Entanglement between two disjoint universes Dr UGAJIN, Tomonori

Invited talks: "What microstate geometries tell us", Masaki Shigemori (Nagoya U. & YITP) (15:30 - 16:30)

-Conveners: Chair: Yoshifumi Hyakutake

time [id] title presenter

15:30 [57] What microstate geometries tell us Prof. SHIGEMORI, Masaki