KEK Theory Meeting on Particle Physics Phenomenology (KEK-PH2023)

Tuesday, 7 November 2023

Short talks: Hugues Beauchesne, V	William DeRocco - Kobayashi Hall (11:05 - 11:55)
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-Conveners: Ryuichiro KITANO	
time [id] title	presenter

	Propertier
11:05[3] Hugues Beauchesne "Observability of the Higgs boson decay to a photon and a dark photon"	
11:30 [41] William DeRocco "Exploring the dark side with high-cadence microlensing"	

Short talks: Keiichi Watanabe, Lukas Treuer - Meeting Room (11:05 - 11:55)

-Conveners: Masato Yamanaka

time [id] title	presenter
11:05[5] Keiichi Watanabe "Revisiting Froggatt-Nielsen Mechanism"	
11:30[6] Lukas Treuer "Quantum Effects on Neutrino Parameters From a Flavored Gauge Boson"	

Short talks: Jason Arakawa, Philip Lu, Kimiko Yamashita, Masato Yamanaka - Meeting Room (16:10 - 17:50)

-Conveners: Wakutaka NAKANO

time [id] title presenter

16:10	[17] Jason Arakawa "Detection of Bosenovae with Quantum Sensors on Earth and in Space"	
16:35	[18] Philip Lu "Regurgitated Dark Matter"	
17:00	[19] Kimiko Yamashita "Positivity Bounds on Higgs-Portal Dark Matter"	
17:25	[21] Masato Yamanaka "Revisit the relic density of Higgs-portal dark matter"	

Short talks: Keisho Hidaka, Lalu Zamakhsyari, Albertus Panuluh, Coh Miyao - Kobayashi Hall (16:10 - 17:50)

-Conveners: Yutaka SAKAMURA

time [id] title presenter

[2] Keisho Hidaka "Impact of quark flavor violating SUSY on h(125) decays at future lepton colliders,"	
[9] Lalu Zamakhsyari "Probing chirality structure in lepton-flavor-violating Higgs decay \$h ¥to ¥tau¥mu\$ at the LHC"	
[10] Albertus Panuluh "Renormalization group effects in the quark sector of universal seesaw model"	
[12] Coh Miyao "Neutrino models based on the U\$\$(1)_{\text{Ymu-\text{Ytau}}}\$\$ gauge symmetry"	

11:15[40] Tetsuo Shindou "Low-scale leptogenesis and dark matter in a

Wednesday, 8 November 2023

three-loop radiative seesaw model"

Short talks: Morimitsu Tanimoto, Yukimura Izawa, Ryosuke Suda, Tetsuo Shindou - Meeting Room (10:00 -11:40)

-Conveners:	Hiroaki	Sugiyama
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time	[id] title	presenter
	[37] Morimitsu Tanimoto "Fermion mass hierarchy and CP violation in modular symmetry"	
10:25	[34] Yukimura Izawa "S4 flavor model with 3HDM"	
	[20] Ryosuke Suda "Model building by Coset space dimensional reduction using eight-dimensional coset spaces"	

Short talks: Takuya Agemura, Ahmed Hammad, Mihoko NOJIRI, Satsuki Nishimura - Kobayashi Hall (10:00 -11:40)

-Conveners: Motoi ENDO

time [id] title presenter

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	[27] Takuya Agemura "On $\Lambda_{QCD^2/m}$ renormalons of pole mass and interquark potential"	
	[29] Ahmed Hammad "Classical/Quantum contrastive learning models for collider analyiss"	
10:50	[31] Mihoko NOJIRI "Anatomy of Jet classification using deep learning"	
	[33] Satsuki Nishimura "Exploring the flavor structure of quarks and leptons with reinforcement learning"	

Short talks: Shuhei Ohzawa, Atsuya Niki, Ya-Juan Zheng - Kobayashi Hall (16:10 - 17:50)

-Conveners: Mihoko NOJIRI

time [id] title presenter

16:10	[42] Canceled	
	[45] Shuhei Ohzawa "Discrimination of Extended Higgs Sectors through Higher-Order Contributions to the Higgs Trilinear Coupling"	
17:00	[46] Atsuya Niki "Indirect search for the WIMP at ¥mu^+¥mu^+ collider"	
17:25	[47] Ya-Juan Zheng "CP-violating top-Higgs coupling in SMEFT"	

Short talks: Xinru Wang, Yushi Mura, Chikako Idegawa, Pedro Pasquini - Meeting Room (16:10 - 17:50)

-Conveners: Joe Sato

time [id] title presenter

16:10 [48] Xinru Wang "QCD preheating"	
16:35 [49] Yushi Mura "New theoretical constraints on the non-decoupling physics with the mass dependent beta function"	

KEK	Theory Meeting on Particle Physics Phenomenology (KEK-PH2U23) / Programme	Wednesday, 8 November 2023
17:	:00 [50] Chikako Idegawa "Electron electric dipole moment and electroweak baryogenesis in a complex scalar extension of the Standard Model"	
17	:25[51] Pedro Pasquini "light BSM physics search using radiative emission of	

neutrino pair"

Thursday, 9 November 2023

Short talks: Joe Sato, Shonosuke Takeshita, Keiya Ishiguro - Meeting Room (10:40 - 11:55)

-Conveners: Masahiro Ibe

time	[id] title	presenter
10:40	[39] Joe Sato "Asymmetric mediator in scotogenic model"	
	[22] Shonosuke Takeshita "W boson mass and grand unification via the type-II seesaw-like mechanism"	
11:30	[23] Keiya Ishiguro "Finite Landscape on toroidal orientifolds with h^{2} , 1	

Short talks: Kensuke Akita, Natsumi Nagata, JUNSEOK LEE - Kobayashi Hall (10:40 - 11:55)

-Conveners: Andrea Mitridate

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time [id] title presenter

[14] Kensuke Akita "Supernova 1987A limits on heavy neutral leptons and \${\text{\text{Y}}rm U(1)}_{L_\text{\text{Y}}mu-L_\text{\text{\text{tau}}}\\$ gauge bosons from the high-energy tail of neutrino fluxes"	
[15] Natsumi Nagata "Vortex Creep Heating vs. Dark Matter Heating in Neutron Stars,"	
[16] JUNSEOK LEE "Nanohertz Gravitational Waves from Axion Domain Walls Coupled to QCD"	

Short talks: Shohei Okawa, Risshin Okabe, Shota Saito - Kobayashi Hall (15:10 - 16:25)

-Conveners: Natsumi Nagata

time [id] title	presenter
15:10 [24] Shohei Okawa "Renormalization group phenomenology,"	effects in QCD axion
15:35 [25] Risshin Okabe "Axion detection via supphase and quantum measurement technique	.
16:00 [26] Shota Saito "Cosmological axions chall	lenge string theory"

Short talks: Shuntaro Aoki, Hexu Zhang, Yuma Narita - Meeting Room (15:10 - 16:25)

-Conveners: Kyohei Mukaida

time [id] title presenter

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15:10	[28] Shuntaro Aoki "Inflationary Correlators with Dynamical Mass,"	
	[30] Hexu Zhang "Dynamical realization of the small field inflation black of Coleman-Weinberg type in the post supercooled universe,"	
16:00	[32] Yuma Narita "Hybrid inflation driven by the QCD axion"	

Short talks: Kento Asai, Akifumi Chitose, Chuan-Ren Chen - Kobayashi Hall (16:45 - 18:00)

-Conveners: Dario Buttazzo

time	[id] title	presenter
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	[35] Kento Asai "New Constraint on Dark Photon at T2K Off-Axis Near Detector"	
	[36] Akifumi Chitose "Cosmic strings and monopoles from hidden symmetry"	
17:35	[38] Chuan-Ren Chen "Impacts of ALP on the constraints of dark photon"	

Short talks: Masashi Aiko, Kazunari Shima, Nodoka Yamanaka - Meeting Room (16:45 - 18:00)

-Conveners: Shohei Okawa

time [id] title	presenter
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16:45	[56] Masashi Aiko "Higgs Probes of axion-like particles"	
	[43] Kazunari Shima "Phenomenological aspect of Nonlinear Supersymmetric General Relativity(NLSGR)ity"	
	[44] Nodoka Yamanaka "Unphysical topological charge of nonabelian gauge theory"	

Friday, 10 November 2023

Short talks: Ryo Yokokura, Takafumi Kai - Kobayashi Hall (10:35 - 11:25)

-Conveners: Gregory Loges

time [id] title	presenter
10:35 [7] Ryo Yokokura "Generalized chiral instabilities, linking numbers, and non-invertible symmetries"	
11:00 [8] Takafumi Kai "Flavor, CP and Metaplectic Modular Symmetries in Typ IIB Chiral Flux Vacua"	е

<u>Short talks: Yuanyuan Wang, Takumi Kuwahara</u> - Meeting Room (10:35 - 11:25)

-Conveners: Ahmed Hammad

time	[id] title	presenter

	[11] Yuanyuan Wang "Disappearance of the first-order chiral phase transition in QCD: cosmological implications for dark QCD,"	
11:00	[13] Takumi Kuwahara "Dark Hadrons at LHC lifetime frontier"	