

Hokkaido Workshop on Particle Physics at Crossroads

Thursday, 7 March 2024

Session: Neutrino physics/light particles (10:10 - 12:00)

-Conveners: Ryuichiro KITANO

time	[id] title	presenter
10:10	[2] Neutrino Physics in the Muon Collider Era	DE GOUVEA, Andre
10:50	[3] Making use of electron neutrino beam from muon storage ring	SATO, Joe
11:30	[4] New physics search at lepton beam dumps	KENTO, Asai

Session: Cosmology (13:30 - 15:00)

-Conveners: Takeo Moroi

time	[id] title	presenter
13:30	[5] Light dark matter search with Noble gas TPC	KIMURA, Masato
14:00	[45] Muon Philic Forces and Dark Matter at Future Facilities	KRNJAIC, Gordan
14:30	[8] The origin of pseudo-Nambu-Goldstone-Boson Dark Matter	TSUMURA, Koji

Session: Student session (16:40 - 17:40)

-Conveners: Shohei OKAWA

time	[id] title	presenter
16:40	[38] T-violation of neutrino oscillation at \boxtimes TRISTAN	SUGAMA, Sho
16:50	[39] Higgs Production at $\mu^+ \mu^+$ Colliders	TREUER, Lukas
17:00	[40] Quantum entanglement of ions for light dark matter detection	TAKAI, Ryoto
17:10	[41] WIMPs at $\mu^+ \mu^+$ collider	WEI, Shang-Fu
17:20	[42] New Contributions to Lepton Dipole Moments in Vector-like Lepton Models	OSAKI, Genta
17:30	[43] Thermal Leptogenesis in the Minimal Gauged $U(1)_{L\mu-L\tau}$ Model	WADA, Juntaro

Friday, 8 March 2024

Session: Cosmology (09:00 - 10:00)

-Conveners: Patrick Fox

time	[id] title	presenter
09:00	[27] On Stability of Fermionic Superconducting Current in Cosmic String	IBE, Masahiro
09:30	[28] Dark Supercooled Phase Transition as a Key to Unlock the Universe	NAKAI, Yuichiro

Session: FCC/ILC (10:20 - 12:10)

-Conveners: Ian Low

time	[id] title	presenter
10:20	[25] Status of the FCC Feasibility Study	GROJEAN, Christophe
11:00	[20] International Linear Collider: status of studies and situations	SUEHARA, Taikan
11:40	[21] Physics of extended Higgs models and their test at future collider and cosmological experiments	KANEMURA, Shinya

Session: MuC/muTRISTAN (13:30 - 15:00)

-Conveners: Christophe Grojean

time	[id] title	presenter
13:30	[30] Portrait of Higgs with Inclusive Rate via Forward Muon Detection	LIU, Zhen
14:00	[31] muTristan	MATSUDO, Ryutaro
14:30	[32] Design study of muTRISTAN	YOSHIDA, Mitsuhiro

Session: Detector studies (15:20 - 16:50)

-Conveners: Shinji OGAWA

time	[id] title	presenter
15:20	[33] Muon Collider Detector	DIPETRIELLO, Karri
15:50	[34] Experimental Challenges and Opportunities of a High Energy Muon Collider	OJALVO, Isobel
16:20	[35] Development of silicon tracking detector with precise timing and spatial resolution	NAKAMURA, Koji

Saturday, 9 March 2024

Session: report from KEK and P5 (09:00 - 10:20)

-Conveners: Tsutomu MIBE

time	[id] title	presenter
09:00	[22] Plan of future KEK projects	OKADA, Yasuhiro
09:40	[23] The P5 Report and Muon Collider Development in the US	PALMER, Mark

Session: Muon collider physics (10:40 - 12:00)

-Conveners: Andre de Gouvea

time	[id] title	presenter
10:40	[24] Muon Collider Progress	SCHULTE, Daniel
11:20	[36] Muon Collider Physics Challenges	WULZER, Andrea

Session: Muon collider physics (13:30 - 15:30)

-Conveners: Andrea Wulzer

time	[id] title	presenter
13:30	[37] Higgs physics at a Muon Collider	MEADE, Patrick
14:10	[29] Beyond the Standard Model at Muon Colliders	CRAIG, Nathaniel
14:50	[18] Muonium oscillation experiment at Fermilab	YONEHARA, Katsuya

Session: Advanced muon experiments (15:50 - 17:20)

-Conveners: Koji Nakamura

time	[id] title	presenter
15:50	[19] Muon cooling at J-PARC	KAMIOKA, Shusei
16:20	[16] Search for charged lepton flavor violation with muons	UCHIYAMA, Yusuke
16:50	[17] Muon $g-2$ /EDM experiment at J-PARC	OGAWA, Shinji

Sunday, 10 March 2024

Session: Particle physics and cosmology (09:00 - 10:40)

-Conveners: Shusei KAMIOKA

time	[id] title	presenter
09:00	[7] Dark Matter Detection with Quantum Computers	MOROI, Takeo
09:40	[13] Indirect probes of muon EDM and spin force	EMA, Yohei
10:10	[12] WIMP Dark Matter at Collider	SHIRAI, Satoshi

Session: Particle physics and cosmology (11:00 - 13:00)

-Conveners: Ryutaro Matsudo

time	[id] title	presenter
11:00	[26] Axion wind detection with superfluid helium-3	KAHN, Yoni
11:30	[14] Axion and accelerator	YIN, Wen
12:00	[15] Interplay of new physics effects in muon $g-2$, EDM and LFV with $U(2)$ flavor symmetry	YAMAMOTO, Kei
12:30	[11] Axion fragmentation and axion dark matter	SATO, Ryosuke