



# HHIQCD2024

## Monday, October 28, 2024

### Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (9:10 AM - 10:40 AM)

-Conveners: Atsushi Hosaka

time	[id] title	presenter
9:10 AM	[87] Born-Oppenehimer EFT (BOEFT) for quarkonium, tetraquark, hybrids, pentaquarks and doubly heavy baryons	BRAMBILLA, Nora
10:10 AM	[82] Threshold cusp structures in multi-channel scattering	SONE, Katsuyoshi

### Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (11:10 AM - 12:40 PM)

-Conveners: Nora Brambilla

time	[id] title	presenter
11:10 AM	[41] Study of multiquark states based on effective models	HARADA, Masayasu
12:10 PM	[58] Internal structure of $\$T_{cc}\$$ and $\$X(3872)\$$ by using compositeness	KINUGAWA, Tomona

### Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (2:00 PM - 3:00 PM)

-Conveners: Masayasu Harada

time	[id] title	presenter
2:00 PM	[126] Chiral symmetry in nuclear medium observed in spectroscopy of pionic atoms	ITAHASHI, Kenta

### Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (3:30 PM - 5:30 PM)

-Conveners: Huey-Wen Lin

time	[id] title	presenter
3:30 PM	[31] $\Lambda(1405)$ in the flavor SU(3) limit from lattice QCD	MURAKAMI, Kotaro
4:30 PM	[123] Studies of Heavy dibaryons and QCD topology from Lattice QCD	JUNNARKAR, Parikshit

# Tuesday, October 29, 2024

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (9:00 AM - 10:00 AM)

-Conveners: Kenta Itahashi

time	[id] title	presenter
9:00 AM	[19] Chiral EFT for nuclear interactions using gradient flow	EPELBAUM, Evgeny

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (10:30 AM - 12:30 PM)

-Conveners: Kotaro Murakami

time	[id] title	presenter
10:30 AM	[79] Parton Distributions from Lattice and Impacts on Global QCD analysis	LIN, Huey-Wen
11:30 AM	[107] Stabilised Wilson fermions -- from large-scale to master-field simulations	FRITZSCH, Patrick

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (2:00 PM - 3:30 PM)

-Conveners: Parikshit Junnarkar

time	[id] title	presenter
2:00 PM	[84] $\pi\pi$ scattering on the lattice and its application	TOMII, Masaaki
3:00 PM	[75] Lattice QCD applications of optimised meson operators in the distillation framework	HEITGER, Jochen

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (4:00 PM - 6:00 PM)

-Conveners: Patrick Fritzscht

time	[id] title	presenter
4:00 PM	[105] DbarN interaction from the HALQCD method (and scattering theory in the near-threshold region based on analyticity of the S-matrix)	YAMADA, Wren
5:00 PM	[57] Emergence of New Systematics for Open Charm Production in High Energy Collisions	Prof. REDLICH, Krzysztof
5:30 PM	[32] Application of the Worldvolume HMC method to lattice field theories	FUKUMA, Masafumi

# Wednesday, October 30, 2024

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (9:00 AM - 10:30 AM)

-Conveners: Kenta Shigaki

time	[id] title	presenter
9:00 AM	[103] Exploring the hadronic interactions in three-body systems at the LHC	DEL GRANDE, Raffaele
10:00 AM	[67] Femtosopic study of the $\Omega \alpha$ interaction in heavy-ion collisions	Dr ETMINAN, Faisal

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (11:00 AM - 12:30 PM)

-Conveners: Tetsuo Hyodo

time	[id] title	presenter
11:00 AM	[99] Exploring Exotic Hadrons: A Machine Learning Approach to Amplitude Analysis	SOMBILLO, Denny Lane
12:00 PM	[13] Learning Hadron Interactions from Lattice QCD and Femtoscopy	WANG, Lingxiao

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (2:00 PM - 3:30 PM)

-Conveners: Masakiyo Kitazawa

time	[id] title	presenter
2:00 PM	[65] Veneziano's ghost and the chiral phase transition.	PISARSKI, robert
3:00 PM	[40] Index of lattice Dirac operators and K-theory	FUKAYA, Hidenori

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (4:00 PM - 5:00 PM)

-Conveners: Masaaki Tomii

time	[id] title	presenter
4:00 PM	[28] Study of Chiral and Axial symmetry in $N_f=2$ QCD using Mobius Domain Wall Fermions	WARD, David
4:30 PM	[93] Lee-Yang zeros for locating a critical point	KITAZAWA, Masakiyo

# Thursday, October 31, 2024

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (9:00 AM - 10:30 AM)

-Conveners: robert pisarski

time	[id] title	presenter
9:00 AM	[33] Emergent Symmetries and Entanglement Suppression	LOW, Ian
10:00 AM	[111] The phi-N and phi-nucleus interaction from theory and experiment	GUBLER, Philipp

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (11:00 AM - 12:00 PM)

-Conveners: TORU KOJO

time	[id] title	presenter
11:00 AM	[63] Exploring the matter in the core of neutron stars	Prof. WEISE, Wolfram

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (1:30 PM - 2:30 PM)

-Conveners: Ian Low

time	[id] title	presenter
1:30 PM	[118] Connecting quarks to the cosmos: The role of quark masses.	REDDY, Sanjay

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (3:00 PM - 5:00 PM)

-Conveners: Chihiro Sasaki

time	[id] title	presenter
3:00 PM	[92] Investigating the $\Sigma$ potential in nuclear matter toward solving the hyperon puzzle of neutron stars	JINNO, Asanosuke
3:30 PM	[47] Interplay between the weak-coupling results and the lattice data in dense QCD	FUJIMOTO, Yuki
4:00 PM	[106] Hydrodynamics of superfluid phases in neutron star inner crusts	HONGO, Masaru
4:30 PM	[25] Framework for phase transitions between the Maxwell and Gibbs constructions	ZHAO, Tianqi

# Friday, November 1, 2024

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (10:00 AM - 11:00 AM)

-Conveners: Yoshimasa Hidaka

time	[id] title	presenter
10:00 AM	[125] Strongly coupled dynamics of quantum field theory and topologies	YONEKURA, Kazuya

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (11:30 AM - 12:30 PM)

-Conveners: Yoshimasa Hidaka

time	[id] title	presenter
11:30 AM	[132] Toward Quantum Simulating the Strong Force	DAVOUDI, Zohreh

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (2:00 PM - 3:00 PM)

-Conveners: Kazuya Yonekura

time	[id] title	presenter
2:00 PM	[50] Tensor Networks for Gauge Theories	EMONTS, Patrick

## Nishinomiya-Yukawa workshop - Panasonic Auditorium, Yukawa Hall (3:30 PM - 4:30 PM)

-Conveners: Kazuya Yonekura

time	[id] title	presenter
3:30 PM	[30] Grassmann bond-weighted tensor renormalization group approach to 1+1D two-color QCD with staggered fermions at finite density	KWOK, Ho Pai
4:00 PM	[5] The dispersive approach to nonperturbative QCD	LI, Hsiang-nan