



# SQAI-NCTS Workshop on Quantum Technologies and Machine Learning

Monday, 25 August 2025

Contributed talks: Masahiro Hoshino , Rihito Sakurai , Kanta Masuki (15:15 - 16:15)

-Conveners: TBA

time	[id] title	presenter
15:15	[104] Stabilizer Rényi Entropy and Conformal Field Theory	HOSHINO, Masahiro
15:35	[103] Chebyshev and tensor cross interpolation for Monte-Carlo-based option sensitivities	SAKURAI, Rihito
15:55	[105] Generative diffusion model with inverse renormalization group flows	MASUKI, Kanta

# Tuesday, 26 August 2025

## Contributed talks (15:15 - 16:15)

time	[id] title	presenter
15:15	[107] Lattice Chiral Fermion without Hermiticity	MA, Chen-Te
15:35	[132] Interference-caged quantum many-body scars: the Fock space topological localization and interference zeros	TAN, Tao-Lin
15:55	[112] Dualities among scar states	FONTANA, Weslei

## Contributed talks (16:30 - 17:30)

time	[id] title	presenter
16:30	[119] A holographic aspect of dynamical mean-field theory	OKUNISHI, Kouichi
16:50	[118] Direct calculation of parton distribution functions with time evolved tensor network states	SCHNEIDER, Manuel
17:10	[117] Clifford-augmented MPS technique for fermionic systems	YOSPRAKOB, Atis

# Wednesday, 27 August 2025

## Contributed talks (14:00 - 15:00)

time	[id] title	presenter
14:00	[106] Interplay Between Stripe Order and Superconductivity in a Modulated XY Model	Dr SONG, Feng-Feng
14:20	[123] Thermal Hall transport in extended Kitaev models	Prof. OKUBO, Tsuyoshi
14:40	[120] Adaptive Tensor Tree Method with Annealing of Mini-batch Samples for Generative Modeling on Quantum Devices	Prof. HARADA, Kenji

## Contributed talks (15:15 - 16:15)

time	[id] title	presenter
15:15	[122] Higher-order tensor renormalization group with the all-mode technique	NAKAYAMA, Katsumasa
15:35	[150] Quantum-Inspired Digital Annealing for Multi-Student Course Timetabling and Quantum Algorithm Validation	Mr LIU, Yu-Cheng
15:55	[149] Quantum Convolutional Neural Network Classifier with 2-Dimensional Tensor Networks	HSING, Chia-Wei

## Contributed talks (16:30 - 17:30)

time	[id] title	presenter
16:30	[144] Renormalization group and classification of anyons as projection	Dr FUKUSUMI, Yoshiki
16:50	[99] Area Law and Provably Efficient Algorithm for Quantum Gibbs States in Long-Range Interacting Systems	KIM, Donghoon
17:10	[100] Entanglement area law in interacting bosons: from Bose-Hubbard, $\phi^4$ , and beyond	KIM, Donghoon

# Thursday, 28 August 2025

**Contributed talks (15:15 - 15:55)**

time	[id] title	presenter
15:15	[139] Magnetic effects of non-magnetic impurities in gapped short-range resonating valence bond spin liquids	ANSARI, MD ZAHID
15:35	[138] Environment expansion for MPS time evolution	OSBORNE, Jesse

# Friday, 29 August 2025

**Contributed talks (15:15 - 16:15)**

time	[id] title	presenter
15:15	[131] Targeting the most typical state among the thermal pure quantum states	IWAKI, Atsushi
15:35	[124] Parallel Gradient Estimation of Parameterized Quantum Circuit	IMAMURA, Soichiro
15:55	[128] Embedding of General Tree Tensor Networks into Quantum Circuits	INOMATA, Kazuki