



# BNL-HET & RBRC Joint Workshop "DWQ@25": The event marks the passage of twenty-five years since the first numerical simulations with Domain Wall Quarks (DWQ)

**Monday, 13 December 2021**

## Theory/Computational/Algorithms (08:00 - 17:10)

time	[id] title	presenter
08:00	[1] Interplay of Lattice Fermion & Pauli-Villars Fields	SHAMIR, Yigal
08:30	[2] Domain-wall Fermion & Atiyah-Patodi-Singer Index	FUKAYA, Hidenori
09:00	[3] Application of Tensor Renormalization Group to Quantum Field Theories	KURAMASHI, Yoshinobu
09:30	[4] Gauge covariant neural network and full QCD simulation	TOMIYA, Akio
10:00	Break	
10:30	[5] Search for an Effective Change of Variable in QCD Simulations	MATSUMOTO, Nobuyuki
11:00	[6] The Chiral Anomaly & the Gradient Flow	LUESCHER, Martin
11:30	[7] The Small (gradient-)flow-time Expansion of the Effective Electro-weak Hamiltonian	HARLANDER, Robert
12:00	[8] Recent Master-field Studies	BRUNO, Mattia
12:30	Lunch	
14:00	[9] Renormalization Group and Gradient Flow: Non-perturbative determination of the beta function and anomalous dimensions	HASENFRATZ, Anna
14:30	[10] Large domain DDHMC for Domain Wall Fermions	BOYLE, Peter
15:00	[11] Index Theorems, Generalized Hall Currents, & Topology for Domain Wall Fermions	KAPLAN, David
15:30	[12] Study of Riemann Manifold HMC for Lattice QCD	JUNG, Chulwoo
16:00	[13] Accelerated Sampling Techniques in Lattice QCD	FOREMAN, Sam
16:20	[14] A Variance Reduction Technique for Hadronic Correlators with Partially Twisted Boundary Conditions	BARONE, Alessandro