

International Symposium on Intrinsic Localized Modes: 30th Anniversary of Discovery

January 25-27, 2018, Kyoto, Japan

1/25(Thu)		
9:00-9:10	Opening	Masayuki Sato
9:10-10:10	The Legacy of Discrete Breathers	Sergej Flach
Short Break(10min)		
10:20-11:00	Localized Excitations in 2D Lattices and Transport of Charged Particles	Alexander Chetverikov
11:00-11:40	Discrete Breathers in Arrays of Magnetic Dots	Yaroslav Zolotaryuk
11:40-12:20	Phase Dynamics of Tunneling Intrinsic Localized Modes in Weakly Coupled Nonlinear Chains	Yury A. Kosevich
Lunch Break(90min)		
13:50-14:30	Delocalized Nonlinear Vibrational Modes: Relation to Discrete Breathers	Sergey Dmitriev
14:30-15:10	Modeling of Discrete Breathers in Crystals from ab initio and in Classical Approach: Pros and Cons	Ivan Lobzenko
15:10-15:50	Surface Discrete Breathers in Pt ₃ Al	Elena Korznikova
Short Break(20min)		
16:10-16:50	Nonlinear Atomic Vibrations and Structural Phase Transitions in Strained Carbon Chains	George Chechin
16:50-17:30	Nonlinear Atomic Vibrations in Strained Graphene Monolayer: Bushes of Nonlinear Normal Modes	Denis Ryabov
17:30-18:10	Experiments and Theory on Solitary Waves in Muscovite Mica	Juan F.R. Archilla

1/26(Fri)		
9:00-9:40	How Intrinsic Localized Modes were Produced	Kenji Kisoda
9:40-10:20	Experiments and simulations of stationary and traveling Intrinsic localized modes	Masayuki Sato
Short Break(10min)		
10:30-11:10	Time-periodic Driving of Nuclear Reactions by Intrinsic Localized Modes Arising in Hydrogenated Metals	Volodymyr Dubinko
11:10-11:50	Nonlinear Compact Periodic Solutions in Flat Band Networks	Carlo Danieli
Lunch Break(90min)		
13:20-14:00	Topological Protection of Mechanical Wave Modes in Tunable 1D and 2D Lattices	Jinkyu Yang
14:00-14:40	Nonlinear Wave Propagation in Origami-based Mechanical Metamaterials	Hiromi Yasuda
14:40-15:20	Discrete Breathers in Granular Chains	Guillaume James
Short Break(20min)		
15:40-16:20	Energy Localization in Ring Coupled Boost Converters Using Passivity Based Control	Rutvika Manohar
16:20-17:00	Chameleon's Behavior of the Discrete Nonlinear Electrical Transmission Lattice	Alain Bertrand Togueu Motcheyo
17:00-18:00	Poster Session	
19:30-21:30	Banquet	

1/27(Sat)		
9:00-9:40	Using Hilbert transform and classical chains to simulate quantum walks	Daxing Xiong
9:40-10:20	Ergodicity-breaking in Discrete Nonlinear Schrodinger Equation	Mithun Thudiyangal
10:20-11:00	Geometric formulation of a class of natural Hamiltonian systems - in search for an extension of Toda's dual transform -	Shin-itiro Goto
11:00-11:10	Closing	Masayuki Sato
13:00	Excursion	

Poster Session(1/26 17:00-18:00)		
P1	Ergodic to Nonergodic Transition in DNLS Lattice	Yagmur Kati
P2	Investigation of Spatially Localized Oscillations in the Two-dimensional Hexagonal Lattice of Fermi-Pasta-Ulam beta Type of Fermi-Pasta-Ulam beta Type	Shun Izumi
P3	Lattice spatial modes and switching to ILMs in an electric transmission line	K. Miyasaka
P4	Driving condition for generating train of moving ILMs in one-dimensional FPU chain	Soichiro Tanaka
P5	Thermal conduction in symmetric potential lattices	Kazuyuki Yoshimura
P6	Dynamics of Moving Intrinsic Localized Modes in Pairwise Interaction Symmetric Potential Lattices	Yusuke Doi
P7	A Numerical Study on Localized Modes in Resonant Circuit Array for Application to Wireless Power Transfer	Masayuki Kimura