

Hybrid Workshop on
Collective Phenomena in Crystalline Materials

7 May 2025 (17 Ordibehesht 1404)

8:00-8:45 Registration

Time	Speaker	Title
8:50-9:00	Opening	
9:00-9:50	Mir Abolhassan Vaezi SUT	Phase diagram of the Kitaev-Hubbard Model
9:50-10:40	Meysam Bagheri U. of Guilan	Unconventional Flat Band in NbOCl ₂ : A New Platform for Spintronics and Optoelectronics
10:40-11:05	Break	
11:05-12:00	Alireza Qaiumzadeh NTNU	Exploring Topological Magnons and Hybrid Magnonic Systems in Layered van der Waals Magnetic Materials
12:00-12:40	Zahra Torbatian IPM	Plasmonic and thermophotonic propertise across Charge-Density-Wave Transition in Tise ₂
12:40-14:00	Lunch	
14:00-14:50	Ali Sadeghi SBU	Resonance between Superatom States and Surface States in a 2D Crystal
14:50-15:40	Babak Zare IUST	Hybrid Systems based on Collective Spin Excitations in Magnetic Materials
15:40-16:10	Break	
16:10-16:50	Mohammad Alidoosti Khatam U.	Electron-Phonon Coupling and Transport Phenomena in 2D Materials: A First-Principles Approach
16:50-17:00	Closing	