## **2025 RIKEN-NCHU JOINT SYMPOSIUM PROGRAM**

Time	4th Sep Thursday
09:00-09:30	Registration
09:30-09:40	Opening Remarks/ Prof. Jenn-Ming Song, Dean of Research & Development Department / Prof. Mon-Shu Ho, Director of iCAST, NCHU
Session I / Chair: Prof. Zing-Way Pei, Graduate Institute of Optoelectronic Engineering, NCHU	
09:40-10:00	<b>Dr. Koji Ishibashi / RIKEN</b> Carbon nanotubes for quantum dots
10:00-10:20	<b>Dr. Jun-Yi Wu / TKU</b> Two-detector reconstruction of multiphoton states in photonic quantum computing
10:20-10:40	Dr. Yu-Chieh Lin / RIKEN  Development and Applications of Ultrafast Laser Technology
Coffee Break	
Session II / Chair: Prof. Watson Kuo, Department of Physics, NCHU	
10:55-11:15	<b>Dr. Naoki Ogawa/ RIKEN</b> Optical magneto-electric diode
11:15-11:35	<b>Dr. Yukako Fujishiro / RIKEN</b> Topological phase transitions explored under extreme conditions
11:35-11:55	Dr. Denis Maryenko / RIKEN Unconventional superconductivity at oxide interfaces
Lunch	
Session III / Chair: Prof. Guang-Yin Chen, Department of Physics, NCHU	
13:30-13:50	<b>Dr. Franco Nori / RIKEN</b> Introduction to Artificial neural networks and Machine Learning with a few applications to Quantum Physics
13:50-14:10	Dr. Korenobu Matsuzaki / RIKEN  Quantum-enhanced absorption spectroscopy using entangled photon pairs and its applications
14:10-14:30	Dr. Utkarsh Kumar / NCHU  Development of machine learning enabled gas sensor for detecting toxic gas at ppb levels
Coffee Break	
Session IV/ Chair: Prof. Kun-Yi Lin, Department of Environmental Engineering, NCHU	
14:45-15:05	<b>Dr. Fumito Araoka / RIKEN</b> Ferroelectric and Helielectric Nematic Liquid Crystals
15:05-15:25	Dr. Tsung-Han Liu / NCHU  Hyper-Raman Spectroscopy Detects Changes in Vibrational Motions of Water Induced by Osmolytes
15:25-15:45	<b>Dr. Ma Zon / NCHU</b> III-V Compound Semiconductor Quantum Structures for Photonic Applications
15:45-16:15	Poster Session
16:15-	Award Presentation and Closing Ceremony