

Program of Session S1

High Energy Physics

(other activities are mentioned in the conference's main program)

Date: October 13-15, 2025

Venue: Phenikaa University, Duong Noi, Hanoi

Organizers: Phenikaa University, NYCU Institute of Physics, and Vietnam Physical Society

No.	Time	Title and authors	Presenter
October 13, 2025			
10:45 – 11:45		Oral session chaired by Le Duc Ninh ; location: Room 1 (104 A8)	
S1.K1	10:45 – 11:15	Probing dark sectors with vector mediators using ANTARES and IceCube search data for neutrino fluxes from dark matter annihilation in the galactic halo	Prof. Guey-Lin Lin National Yang Ming Chiao Tung University
S1.I1	11:15 – 11:45	A Precision Test of the Standard Model: The Final Results from the Fermilab Muon g-2 Experiment <i>[ONLINE]</i>	Dr. Tran Hoai Nam Boston University
October 13, 2025 Afternoon			
13:30 – 15:10		Oral session chaired by Eibun Senaha ; location: Room 1 (104 A8)	
S1.I2	13:30 – 13:55	Connecting Tiny Neutrino Masses and keV Dark Matter in a $U(1)_N$ Model	Assoc. Prof. Do Thi Huong Institute of Physics, VAST
S1.I3	13:55 – 14:0	Effect of Cosmic Neutrino Background on the Dark Matter Self-interaction	Dr. Pawin Ittisamai Chulalongkorn University
S1.I4	14:20 - 14:45	Phenomenological Studies of the Two-Higgs-Doublet Model: Parameter Space scanning, Collider Signatures, and Loop-Induced scalar Higgs Decays	Dr. Phan Hong Khiem Duy Tan University
S1.K2	14:45 – 15:10	The 3-3-1 model with $U(1)_{B-L}$ and Peccei-Quinn symmetries <i>[ONLINE]</i>	Prof. Hoang Ngoc Long Van Lang University
15:25 – 16:00		Poster session 1	
16:00 – 17:30		Oral session chaired by Phan Hong Khiem ; location: Room 1 (104 A8)	

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S1.I5	16:00 – 16:30	Probing the ATOMKI X17 vector boson using Dalitz decays $V \rightarrow P e^+ e^-$	Dr. Tran Chien Thang HCMC University of Technology and Education
S1.I6	16:30 – 17:00	Exploring CP Violation and Electron EDM Cancellation in a Scale-Invariant g2HDM	Dr. Eibun Senaha Van Lang University
S1.I7	17:00 – 17:30	Recent Dark Matter/Photon/Higgs search results from ATLAS [ONLINE]	Dr. Vu Ngoc Khanh Shanghai Jiao Tong University
October 14, 2025 Afternoon			
15:25 – 16:00		Poster session 2	
16:00 - 17:00		Oral session chaired by Tran Chien Thang ; location: Room 1 (104 A8)	
S1.I8	16:00 - 16:20	The influence of the scalar unparticle and polarization on the exclusive W boson hadronic decays in the final state at muon colliders in the Randall-Sundrum model	Prof. Dang Van Soa University of Economics - Technology for Industries
S1.I9	16:20 - 16:40	Novel probes for electron-muon flavor violation from exotic Higgs decays	Dr. Reinard Primulando Parahyangan Catholic University, Indonesia
S1.I10	16:40 - 17:00	Physics Through the Lens of Neutrino Oscillations: Mass, Mixing, and CP Violation [ONLINE]	Dr. Cao Van Son Institute for Interdisciplinary Research in Science and Education, ICISE

List of poster presentations

Poster session 1		
October 13, 2025: 15:25 – 16:00		
Chairpersons: Do Thi Huong, Le Duc Ninh		
S1.P1	The new $(g-2)_{\{e,\mu\}}$ data and LFV decays in a left-right model	Msc. Nguyen Hua Thanh Nha Van Lang University
S1.P2	A minimal complete model for flavor physics, neutrino mass, and dark matter	Dr. Duong Van Loi Phenikaa University
S1.P3	On dark matter fermions production in $e^+ e^-$ collisions	Ms. Truong Minh Anh Hanoi University of Science and Technology
S1.P4	Effects of (s)neutrinos on the Higgs masses and trilinear Higgs self-couplings	Dr. Dao Thi Nhung Phenikaa University
S1.P5	General Formulas for Loop-Induced Decays of $A \rightarrow Z\gamma\gamma$ and Their Applications	Msc. Tran Tri Dzung Duy Tan University
S1.P6	The Hierarchical Symmetry Breaking Chain $E_8 \supset E_7 \supset E_6 \supset SO(10) \supset SU(5) \supset SM :$	Assoc. Prof. Nguyen Huy Thao

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	A Comprehensive Review	Ms. Nguyen Thi Nguyet Nga Hanoi Pedagogical University 2
Poster session 2 October 14, 2025: 15:25 – 16:00 Chairpersons: Do Thi Huong, Tran Chien Thang		
S1.P7	Study light Higgs particles in the $SU(3)_C \times SU(3)_L \times U(1)_X \times U(1)_N$ model	Dr. Nguyen Thu Huong VNU University of Science
S1.P8	Toward precise simulations of polarized ZZ pair production at the LHC	Assoc. Prof. Le Duc Ninh Phenikaa University
S1.P9	Finding the Higgs Boson with ATLAS Open Data	Mr. Do Hoang Minh Delta Global School
S1.P10	Scalar Dark Matter in Singlet Extension of the Standard Model with Vectorlike Quarks	Mr. Nguyen Minh Hien HCMC University of Science
S1.P11	A Flavor-Dependent U(1) Extension for Flavor Puzzle, Neutrino Mass, and Dark Matter	Dr. Nguyen Tuan Duy Institute of Physics, VAST
S1.P12	The role of radion in SN1987A cooling	Ms. Truong Minh Anh Hanoi University of Science and Technology