## HYP2025 Program

Plenary 29a1 + Plenary 29a2 Monday, September 29, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
08:50-09:00	Opening	
09:00-09:30	The Extension Project of the J-PARC Hadron Experimental Facility	Fuminori Sakuma (RIKEN)
09:30–10:00	Highlights on strangeness production at the LHC	Benjamin Doenigus (Goethe University Frankfurt)
10:00–10:30	Strange and Charming Hadron interactions from Lattice QCD	Takumi Doi (RIKEN iTHEMS)
Coffee Break		
11:00–11:30	Vector meson-baryon interactions via Femtoscopy in strangeness sectors	Albert Feijoo (Southeast University)
11:30–12:00	Quark mass dependence of strange baryons	Raquel Molina Peralta (University of Valencia and IFIC)
12:00–12:30	Current and future programs to investigate the ΛN interaction from scattering experiments	Koji Miwa (Tohoku University)
12:30–13:00	Strangess is the key from KbarN to DDbarK	Lisheng Geng (Beihang University)

Parallel 29p1A + Parallel 29p2A Monday, September 29, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
14:30–14:55	Hypernuclei from lattice EFT	Fabian Hildenbrand (Forschungszentrum Julich)
14:55–15:10	Structures and productions of $\Lambda$ - and $\Xi$ -hypernuclei in an extended shell model	Atsushi Umeya (Nippon Institute of Technology)
15:10–15:25	Continuum States of Lambda Hypernuclei via the (K-, $\pi$ -) Reaction	Madhumita Dhar (Cooch Behar Government Engineering College)
15:25–15:40	Hypernuclear production with antisymmetrized molecular dynamics	Masahiro Isaka (Hosei University)
15:40–15:55	Charge symmetry breaking in hypernuclei within relativistic mean field model	Yusuke Tanimura (Soongsil University)
Coffee Break		
16:25–16:50	Study of Λ's beta decay in hypernuclei physics interest	Hirokazu Tamura (Tohoku University)
16:50–17:05	Study of Λ's beta decay in hypernuclei experimental feasibility	Yuning Hong (Tohoku University)
17:05–17:20	Hypernuclear cluster states of Λ¹²B unveiled through neural network-driven microscopic calculation	Jiaqi Tian (Nanjing University of Aeronautics and Astronautics)
17:20–17:35	Three-cluster resonance structure of Λ <sup>6</sup> Li and Λ <sup>7</sup> Li hypernuclei	Nursultan Kalzhigitov (Al-Farabi Kazakh National University)

Parallel 29p1B + Parallel 29p2B Monday, September 29, 2025 · Room 206

Time (JST)	Title	Presenters
14:30–14:55	Recent progress in Kaon Electroproduction: Impact of new CLAS data on beam-recoil transferred polarization	Terry Mart (Universitas Indonesia)
14:55–15:10	S-wave kaon-nucleon interactions and Θ+ pentaquark from lattice QCD	Kotaro Murakami (Institute of Science Tokyo)
15:10–15:25	Three octet-baryon forces by quark-model potentials	Choki Nakamoto (National Institute of Technology(KOSEN), Suzuka College)
15:25–15:40	Λp scattering experiment in SPring-8	Takuya Nanamura (Tohoku University)
15:40–15:55	Probing Baryon Resonances via $\pi p \to \pi \pi N$ and KY Reactions at J-PARC	Shin Hyung Kim (Kyungpook National University)
Coffee Break		
16:25–16:50	Higher partial waves and resonance contributions in femtoscopy	Tetsuo Hyodo (Tokyo Metropolitan University)
16:50–17:05	Probing the interaction of the ≡ hyperon with nucleons using femtoscopy in ALICE	Raffaele Del Grande (Czech Technical University in Prague)
17:05–17:20	Measurement of differential cross-section and polarization of $\Xi^-$ baryon produced in (K <sup>-</sup> , K <sup>+</sup> ) reaction at 1.8 GeV/c	Byungmin Kang (Korea University)

Parallel 29p1C + Parallel 29p2C Monday, September 29, 2025 · Room 207

Time (JST)	Title	Presenters
14:30–14:45	Application of High Momentum AMD method to KbarN system	Akinobu Dote (KEK theory center)
14:45–15:00	Meson-baryon interactions and $\Lambda(1405)$ in covariant chiral effective field theory	Xiu-Lei Ren (Shandong University)
15:00–15:15	A New Cylindrical Detector System for Studying Light Kaonic Nuclei at J-PARC	Yuto Kimura (RARiS)
15:15–15:30	ALICE 3: the next-generation heavy-ion experiment at the LHC	Bianca Sabiu (University and INFN Bologna)
15:30–15:45	Exploring Kaonic Nucleus via <sup>12</sup> C (K <sup>+</sup> ,p) Reaction at J-PARC	Fumiya Oura (Tohoku University)
Coffee Break		
16:25–16:40	Probing strange quark hadronization via (multi-)strange hadron multiplicity distributions in small collision systems with ALICE	Sara Pucillo (University and INFN-Salerno)
16:40–16:55	Study for the modification of the φ meson mass and chiral-symmetry restoration in nuclear density at J-PARC	Hiroyuki Sako (Japan Atomic Energy Agency)
16:55–17:10	Eigenstates in coupled-channel scattering amplitude and their effects on spectrum	Takuma Nishibuchi (Tokyo Metropolitan University)

Plenary 30a1 + Plenary 30a2 Tuesday, September 30, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
09:00-09:30	Femtoscopy, production, and some recent results	Miguel Albaladejo (IFIC(CSIC-UV))
09:30–10:00	Structure of light S=-2 hypernuclei	Emiko Hiyama (Tohoku University, RIKEN)
10:00–10:30	Advancing hypernuclear experiments through heavy-ion collisions, image analysis, and machine learning	Takehiko R. Saito (High Energy Nuclear Physics Laboratory, RIKEN)
Coffee Break		
11:00–11:30	Overview of hypernuclei measurements at the LHC	Francesco Mazzaschi (CERN)
11:30–12:00	H-Dibaryon Search near the ΛΛ Threshold using a Kaon Beam	Jung Keun Ahn (Korea University)
12:00–12:30	Strangeness Physics at GlueX	Volker Crede (Florida State University)
12:30–13:00	Antikaon absorption in the nuclear medium: the role of hadron self-energies and implications for kaonic atoms	Jaroslava Obertova (Czech Technical University in Prague)

Parallel 30p1A + Parallel 30p2A Tuesday, September 30, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
14:30–14:55	Direct Lifetime Measurement of $\Lambda^3$ , H Hypernuclei using the (K-, $\pi^0$ ) Reaction	Yue Ma (RIKEN)
14:55–15:10	Search for the Λnn hypernucleus in heavy-ion colisions with ALICE	Maria Paula Martins Palhares (University of Sao Paulo)
15:10–15:25	Mass Measurement of s-shell Hypernuclei via Decay Pion Spectroscopy	Ryoko Kino (Tohoku University)
15:25–15:40	Measurement of Charge Symmetry Breaking in A = 4 hypernuclei in 3 GeV Au+Au collisions at RHIC	Tianhao Shao (Fudan University)
15:40–15:55	Formation of hypernuclei through hybrid models in heavy-ion collisions	Nihal Buyukcizmeci (Selcuk University, Turkey)
Coffee Break		
16:25–16:40	New Binding Energy Determinations of Λ³H, Λ⁴H, and Double-Strangeness Hypernuclei via Nuclear Emulsion and Deep Learning	Ayumi Kasagi (Rikkyo University)
16:40–16:55	The Experimental Landscape for Strange Hadron Physics with HypTPC at J-PARC	Shuhei Hayakawa (Tohoku University)
16:55–17:10	Structure of near-threshold states in systems with Coulomb and short-range interactions	Tomona Kinugawa (RIKEN)
17:10–17:25	Core-excitation three-cluster model description of ΛΛ¹ºBe	Hiroyuki Kamada (RCNP, Osaka University)

Parallel 30p1B + Parallel 30p2B Tuesday, September 30, 2025 · Room 206

Time (JST)	Title	Presenters
14:30–14:55	Experimental Studies of the phi-nucleon interaction at SPring-8 and J-PARC	Takatsugu Ishikawa (RCNP, Osaka University)
14:55–15:10	Production Spectra of Λ Hypernuclei from a Lithium-6 Target	Toru Harada (Osaka Electro-Communication University)
15:10–15:25	Lattice QCD study on Nucleon– $\Omega$ ccc and Searching for $\Omega$ ccc nuclei	Liang Zhang (Shanghai Institute of Applied Physics)
15:25–15:40	Searching for the H dibaryon through the physical-point lattice QCD simulations	Kenji Sasaki (University of Niigata Prefecture)
15:40–15:55	Hyperon-deuteron correlation functions calculated using Faddeev three-body wave functions	Michio Kohno (RCNP, Osaka University)
Coffee Break		
16:25–16:50	Femtoscopy at the LHC: Insights into Two- and Three-Baryon Interactions	Laura Serksnyte (CERN)
16:50–17:15	Femtoscopy study of the K⁻ d and K⁺ d interactions	Angels Ramos (University of Barcelona)
17:15–17:30	Femtoscopy using hyperon-nucleus correlation function	Yuki Kamiya (Tohoku University)
17:30–17:45	Λη Cusp Spectroscopy Using the K⁻p Reaction at J-PARC	Ryuta J. Saito (Tohoku University)

# Parallel 30p1C + Parallel 30p2C Tuesday, September 30, 2025 · Room 207

Time (JST)	Title	Presenters
14:30–14:55	Confinement Mechanism in Tetraquark States: An Application to the Fully Heavy Tetraquark State.	GuangJuan Wang (KEK)
14:55–15:10	Search for $\Xi^o$ p, $\Omega^-$ p, and $\Omega^-$ n Bound States from Y(1S) and Y(2S) Decays at Belle	Makoto Uchida (Science Tokyo)
15:10–15:25	Internal structure of exotic hadrons with coupled channel potential in relation with scattering observables	Ibuki Terashima (Tokyo Metropolitan University)
15:25–15:40	Wave functions and radii of bound states with Coulomb plus short-range interaction	Chisato Uno (Tokyo Metropolitan University)
15:40–15:55	Heavy meson-Nucleon molecules and the heavy quark spin structure	Yasuhiro Yamaguchi (Nagoya University)
Coffee Break		
16:25–16:40	Intra-jet Strangeness Enhancement: A New Perspective on Strange Hadron Production in Small Systems	Ryan Hannigan (The University of Texas at Austin)
16:40–16:55	Theoretical study on the production of hyperon resonances in the $K^{\text{-}}$ d scattering	Mao Kurino (Kyoto Sangyo University)
16:55–17:10	Electromagnetic transition form factor of the $\boldsymbol{\omega}$ meson in nuclei	Hiroaki Ohnishi (RARiS, Tohoku University)
17:10–17:25	Structure and Formation of the Deeply Bound pbar atoms via pbar beam	Nobuhide Miyazaki (Kyoto Sangyo University)

### Poster Tuesday, September 30, 2025

ID	Title	Presenters
POS-001	Precise Determination of the Hypertriton Binding Energy from the $\Lambda^3H/\Lambda^4H$ Production Ratio in the $^3,^4He(K^-,\pi^0)\Lambda^3,^4H$ Reaction	Takaya Akaishi (RCNP)
POS-002	Commissioning of magnetic spectrometer for the $\Lambda p$ scattering experiment at SPring-8	Akari Haratani (Tohoku University)
POS-003	Performance evaluation of the water Cherenkov counters for the upcoming hypernuclear missing mass spectroscopy at Jefferson Lab	Kaito Higashimoto (University of Tokyo)
POS-004	Development of the Data Acquisition System and the Analysis Status of the Λp Scattering Experiment at SPring-8	Rintaro Kurata (Tohoku University)
POS-005	Evaluation of Radiation Dose using Geant4 Monte Carlo Simulator in the JLab Hypernuclear Spectroscopy	Jin Takahashi (the University of Tokyo)
POS-006	The Development of a New Aerogel Cerenkov Detector for the Spectroscopic Studies of Kaonic Nuclei	Yuto Tsutsumi (The University of Tokyo)
POS-007	Development of Focal Plane Detector for Hypernuclear Decay Pion Momentum Measurement at Jefferson Lab	Shunsuke NIWA (The University of Tokyo)
POS-008	Analysis of recoil proton detector system for Lambda p scattering experiment at SPring-8	Miyu Yoshida (Tohoku Univ.)
POS-009	Development of New Acrylic Cherenkov counter and Performance of Particle Identification for $\Lambda$ hypernuclear spectrosocpy with the $(\pi^*, K^*)$ reaction (J-PARC E94 Experiment)	Tomohiro Taniguchi (Kyoto University)
POS-010	High resolution spectroscopy of the $\Sigma N$ cusp by using the $d(K^{\text{-}},\!\pi^{\text{-}})$ reaction at J-PARC	Ruri Sasaki (Tohoku University)
POS-011	Precision Measurement of Kaonic Deuterium X-ray with the SIDDHARTA-2	Kairo Toho (Tohoku University)
POS-012	Exploring Chiral Symmetry Restoration via In-Medium K*-Nucleus Scattering at Low Energies	Atsushi Tokiyasu (Tohoku University)
POS-013	Application of Machine Learning for the discrimination of hypernuclear signals in the WASA-FRS experiment	David Calonge (Instituto de Estructura de la Materia, CSIC)
POS-014	Development of a Beam Veto Counter for the J-PARC E45 Experiment	Jae Jin Lee (Kyungpook National University)
POS-015	Extending the limit of A for (anti)hypernuclei analyses from 3 to 4 at the LHC	Janik Ditzel (Goethe University Frankfurt)
POS-016	$\text{p-}\Omega$ correlation function measurements using Machine Learning with ALICE Pb-Pb collisions	Ryoka Tokumoto (Hiroshima University)
POS-017	Photonproduction of hypertriton	Tomohiro Yoshioka (University of Tohoku)

Plenary 1a1 + Plenary 1a2 Wednesday, October 01, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
09:00-09:30	Femtoscopy studies with ALICE: Accessing hadronic interactions and nuclei formation	Otón Vázquez Doce (INFN-LNF)
09:30–10:00	¹²C(K⁻, K⁺) reaction to study the Ξ-nucleus interaction	Yudai Ichikawa (Tohoku University)
10:00–10:30	New Measurements of Lambda-hyperhydrogens and Prospects for Decay Pion Spectroscopy	Sho Nagao (University of Tokyo)
Coffee Break		
11:00–11:30	Structure of light hypernuclei from chiral two- and three baryon forces	Andreas Nogga (Forschungszentrum Juelich)
11:30–12:00	Exploring the Strangeness Frontiers: Kaonic atoms X-ray spectroscopy at DAΦNE with SIDDHARTA-2	Francesco Sgaramella (INFN-LNF)
12:00–12:30	Toshi Yamazaki: A Legacy of Innovation in Hypernuclear and Strange Particle Physics	Ryugo Hayano (The University of Tokyo)
12:30–13:00	Tribute to Tullio Bressani, Bogdan Povh and Toshimitsu Yamazaki	Avraham Gal (Hebrew University)

Parallel 1p1A + Parallel 1p2A Wednesday, October 01, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
14:30–14:55	Ab initio calculations of light hypernuclei for calibration of hypernuclear interactions	Daniel Gazda (Nuclear Physics Institute, CAS)
14:55–15:10	Searching hypernuclei via strangeness tracking in ALICE	Yuanzhe Wang (Fudan University)
15:10–15:25	Current results on light hypernuclei in the WASA-FRS HypHI experiment	Christophe Rappold (Instituto de Estructura de la Materia - CSIC)
15:25–15:40	Simple model applied to Lambda hypernuclei in medium and heavy mass regions	Naotaka Yoshinaga (Saitama University)
15:40–15:55	Hyperon Effects on Nuclear Structure within Skyrme-Hartree-Fock method	Xian-Rong Zhou (East China Normal University)
Coffee Break		
16:25–16:50	Status of X-ray spectroscopic experiments on Ξ- atoms at J-PARC	Takeshi O. Yamamoto (JAEA)
16:50–17:05	Evaluation of Ξ- absorption using the diamond target data of the J-PARC E07 Experiment	Manami Fujita (The University of Tokyo)
17:05–17:20	Double-Strangeness Production in the ¹²C(K⁻, K⁺) Reaction at 1.8 GeV/c	WooSeung Jung (Korea University)
17:20–17:35	Compatibility of recent Ξ-nuclear bound state signals	Avraham Gal

Parallel 1p1B + Parallel 1p2B Wednesday, October 01, 2025 · Room 206

Time (JST)	Title	Presenters
14:30–14:55	Electromagnetic production of pseudoscalar mesons	Dalibor Skoupil (Nuclear Physics Institute, Czech Academy of Sciences)
14:55–15:10	Isospin-breaking effects on the threshold cusp structures	Katsuyoshi Sone (Tokyo Metropolitan University)
15:10–15:25	Hyperon single-particle potentials in nuclear matter based on baryon-baryon interactions derived within chiral effective field theory	Asanosuke Jinno (Kyoto University)
15:25–15:40	Lattice QCD study of baryon-baryon interactions in the S = -1 channel at the physical point	Koichi Murase (Tokyo Metropolitan University)
15:40–15:55	Analysis of Σ* via K_L p scattering	Dan Guo (Peking University)
Coffee Break		
16:25–16:40	Improving the Mass Accuracy of Hypertriton via Precise Beam Energy Measurements using the Synchrotron Radiation Interferometry Method	Kotaro Nishi (The University of Tokyo)
16:40–16:55	Current Status of secondary particle beam extraction at the J-PARC high-momentum beamline	Takaya Akaishi (RCNP)
16:55–17:10	Prospects of missing-mass spectroscopy of $\Lambda$ hypernuclei via the $(\pi+, K+)$ reaction using a high resolution spectrometer S-2S	Daigo Watanabe (Tohoku University)
17:10–17:25	Missing-mass spectroscopy of $\Xi^7H$ via the $^7Li(K^-, K^+)$ reaction (J-PARC E75 phase-1 experiment)	Kengo Ebata (Kyoto University)

Parallel 1p1C + Parallel 1p2C Wednesday, October 01, 2025 · Room 207

Time (JST)	Title	Presenters
14:30–14:55	Molecular nature of the $\Omega(2012)$ and the three-body Kbar*D*D* system	Natsumi Ikeno (Kobe University)
14:55–15:20	Resonance and Strangeness Production in ALICE	Bong-Hwi Lim (INFN Torino)
15:20–15:35	The phi meson in dense matter from a theoretical perspective	Philipp Gubler (Japan Atomic Energy Agency)
15:35–15:50	Irrelevance of anomalous breaking of axial U(1) symmetry and the U(1) problem	Nodoka Yamanaka (Tohoku University)
15:50–16:05	Decay effect on scattering amplitude With complex and coupled-channel potentials	Erick Gushiken (Tokyo Metropolitan University)
Coffee Break		
16:25–16:50	Quasi-bound states in the KbarNN and KbarKbarN systems	Nina Shevchenko (Nuclear Physics Institute, Czech Republic)
16:51–17:05	The study for the Kbar-NN state in photoproduction with LEPS2 spectrometer	Ryo Kobayakawa (RCNP,The University of Osaka)
17:05–17:20	Structure of few-body antikaon-nuclear bound states with the two-body Kbar absorption	Junko Yamagata-Sekihara (Kyoto Sangyo University)
17:20–17:35	Study of Hyperon-nucleon production in the reaction Kd→Λpπ⁻ at 1 GeV/c	Rie Murayama (RIKEN)

Plenary 2a1 + Plenary 2a2 Thursday, October 02, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
09:00-09:30	Machine Learning Light Hypernuclei	Isaac Vidana (Istituto Nazionale di Fisica Nucleare)
09:30–10:00	Hyperon physics at BESIII	Hong-Fei Shen (Institute of High Energy Physics)
10:00–10:30	Hypernuclei Production in Pion-Induced and Heavy-Ion Collisions with HADES	Simon Spies (GSI Helmholtzzentrum fur Schwerionenforschung GmbH)
Coffee Break		
10:50–11:20	Spectroscopy of η'-mesic nuclei	Kenta Itahashi (The University of Osaka)
11:20–11:50	New era of kaonic nuclear states with solenoid-based spectrometers	Tadashi Hashimoto (RIKEN)
11:50–12:20	Exotic hadrons with strangeness and charm	Feng-Kun Guo (Institute of Theoretical Physics, Chinese Academy of Sciences)

### Parallel 3a1A + Parallel 3a2A

Friday, October 03, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
09:00–09:25	The CLAS12 "very strange" experiment - status and early analyses	Daniel Watts (University of York)
09:25–09:40	Backward K*(892) Production in the (K <sup>-</sup> ,p) Reactions from Protons and <sup>12</sup> C at 1.8 GeV/c	Sungwook Choi (Korea Universrity)
09:40-09:55	Electroproduction Study of Λ(1405) with CLAS12	Tatsuhiro Ishige (Tohoku University)
09:55–10:10	Exploring $\Lambda$ and $\Sigma$ Resonances near 1670 MeV with HypTPC at J-PARC	Hae In Lee (Korea University)
Coffee Break		
10:40–11:05	Exotic multistrange-anticharm baryon systems	Eulogio Oset
11:05–11:30	Test the two-pole structure of the ∃(1820) state	Wei-Hong Liang (Guangxi Normal University)
11:30–11:45	Spectroscopy experiment of $\Omega$ baryon using hadron beam at J-PARC	Kotaro Shirotori (RCNP, The University of Osaka)
11:45–12:10	Study of multi-Kaon final states at BESIII	Guangshun Huang (University of Science and Technology of China)

### Parallel 3a1C

Friday, October 03, 2025 · Room 207

Time (JST)	Title	Presenters
09:00–09:25	Hyperon mixing in astrophysical environments from the variational method with bare baryon interactions	Hajime Togashi (Kyoto University)
09:25–09:40	Baryon-quark mixed matter and neutron star EOS	Yasuo Yamamoto (RIKEN)
09:40–09:55	Response of kaon condensation to neutron-star oscillations and implications for gravitational wave signals	Takumi Muto (Chiba Institute of Technology)
09:55–10:20	Impact of hyperons on neutron star mergers	Hristijan Kochankovski (University of Barcelona, Institut de Ciencies del Cosmos)
10:20–10:35	Investigating double-hyperon systems: Insights into $\Lambda\text{-}\Lambda$ and $\Sigma^\text{+}\text{-}\Sigma^\text{+}$ interactions and neutron star cores	Gandharva Appagere (Stockholm University)

### Parallel 3a2B

Friday, October 03, 2025 · Room 206

Time (JST)	Title	Presenters
10:40–11:05	Prospects for Kappa Meson Pole Determination at KLF	Keigo Mizutani (RCNP, The University of Osaka)
11:05–11:20	Study of SiPM performance under the radiation condition at JLab for decay pion spectroscopy of hypernuclei	Ken Nishida (The University of Tokyo)
11:20–11:35	Prospect for the gamma-ray spectroscopy experiment of Λ⁴H with Hyperball system (J-PARC E63)	Chesu Seong (Tohoku University)

Plenary 3p1
Friday, October 03, 2025 · Koshiba Hall

Time (JST)	Title	Presenters
13:55–14:25	High Precision Spectroscopy of Light Lambda hypernuclei at Jefferson Lab	Toshiyuki Gogami (Kyoto University)
14:25–14:55	Hadron Spectroscopy Highlights from Belle and Belle II	Kiyoshi Tanida (Japan Atomic Energy Agency)
14:55–15:25	The Electron Ion Collider	Ralf Seidl (RIKEN)
15:25–15:55	Physics of Hadronic Structure and QCD Phase Structure at HIAF	Nu Xu
15:55–16:25	Strangeness in all its forms: reflections and perspectives from HYP2025. Summary talk	Catalina Oana Curceanu (INFN-LNF)
16:25–16:40	Closing	