

# HYP2015 program

ver. 2015.8.11

	Mon (Sept. 7)	Tue (Sept. 8)	Wed (Sept. 9)	Thu (Sept. 10)	Fri (Sept. 11)						
8:15	Registration										
8:50	Opening										
9:00	Achenbach	Feliciello	Haidenbauer	Nagae	Olsen						
9:30	Nakamura	Nakazawa	Rijken	Jido	Hosaka						
10:00	Motoba	Shah	coffee	Fabbietti	Noumi						
10:30	coffee	coffee	T. Saito	coffee	coffee						
11:00	Tamura	Lenke	Braun-Munzinger	Zmeskal	Pochodzalla						
11:30	Hiyama	Moriya	Lunch + Excursion	Curceanu	Tang						
12:00	Gazda	Nakano		Gandolfi	N. Saito						
12:30	Lunch			Lunch		Summary by Ramos					
13:00	Lunch			Lunch		Lunch					
13:30	Lunch			Lunch							
14:00	1a Gal*	2a Hauenstein*		3a Sakuma Muenzer	4a Ishii*		5a Roca*	6a A. Ohnishi*	7 Isaka*	8 Hyodo T. Yoshida	9 Imai* Oka*
14:30	Yamamoto	Ilieva		Vazquez Doce	Doi		Inoue	Vassiliev	Hagino	Yasui	Miwa*
15:00	Gibson	Hicks		Tokiyasu	Morita	S. Ohnishi	Botvina	Zhou	Maeda	Ahn*	
15:30	Schafer	Schnell		Yamazaki	Sasaki	Miyagawa	Pulawski	Vesely	Suzuki	Kim	
16:00	Gogami	Kao		Yamaguchi	Yamaguchi	Kamano	6b Bombaci*	Itonaga	Sakai	Ma	
16:30	1b Sakaguchi*	2b Mart	3b Mares*	4b Umeya	Sekihara	Yamamoto*	Pérez-Obiol	Itahashi	Discussion		
17:00	Harada	Walford	Dote	Yang	Magas	coffee	coffee	coffee	Poster Session		
17:30	Nakagawa	Kanda	Koike	4c Bressani*	Feijoo	Takatsuka	Move to Sakunami				
18:00	Honda	Tsuchikawa	Waj Mu Mu Phyo	Piano*	Tolos	Togashi	Discussion Session A				
18:30	J. Yoshida	Kaneta	Akaishi	Xu	5b Xiang Liu*	Lonardoni	Discussion Session B				
19:00	Kinbara			Botta*	Takeuchi	Muto					
19:30				Discussion	Xiaohai Liu	Nakamoto					
20:00				Barabanov	Discussion						
20:30	Japanese traditional music concert										
21:00	Reception										
21:00											

\* Invited speaker in parallel sessions

Plenary

Parallel

Parallel (Topical Session)

# Plenary Sessions

\* Tentative title

## Monday

9:00 ~9:30	P. Achenbach	Mainz	High-resolution decay-pion spectroscopy of ${}^4_{\Lambda}\text{H}$ hypernuclei
9:30 ~10:00	S.N. Nakamura	Tohoku	Hypernuclear spectroscopy via $(e,e'K^+)$ reaction
10:00 ~10:30	T. Motoba	Osaka EC	DWIA production cross sections of ${}^{12}_{\Lambda}\text{B}$ and ${}^{10}_{\Lambda}\text{Be}$ calculated with extended wave functions
	Coffee		
11:00 ~11:30	H. Tamura	Tohoku	Gamma-ray spectroscopy of hypernuclei -- recent results and prospect at J-PARC
11:30 ~12:00	E. Hiyama	RIKEN	Structure of few-body light $\Lambda$ hypernuclei
12:00 ~12:30	D. Gazda	ECT*, Trento	No-core shell model approach to hypernuclear structure

## Tuesday

9:00 ~9:30	A. Feliciello	Torino	Experimental studies on the weak decay of $\Lambda$ -hypernuclei
9:30 ~10:00	K. Nakazawa	Gifu	Experimental status of $S = -2$ hypernuclei
10:00 ~10:30	N. Shah	SIAP, Shanghai	$\Lambda$ - $\Lambda$ correlation in HI collisions *
	Coffee		
11:00 ~11:30	H. Lenske	Giessen	Strangeness production on the nucleon and nuclei
11:30 ~12:00	K. Moriya	Arizona SU	Electromagnetic production of strangeness at Jefferson Lab
12:00 ~12:30	T. Nakano	RCNP, Osaka	Present and future of LEPS and LEPS2 *

## Wednesday

9:00 ~9:30	J. Haidenbauer	Jülich	Baryon-baryon interactions from chiral effective field theory
9:30 ~10:00	T.A. Rijken	Nijmegen	Baryon-baryon $\{8\} \times \{8\}$ channels interactions
	Coffee		
10:30 ~11:00	T. Saito	Mainz	Recent progress of the HypHI project at GSI and its perspective at FAIR
11:00 ~11:30	P. Braun-Munzinger	GSI	Hypernuclei from HI collision experiments *

## Thursday

9:00 ~9:30	T. Nagae	Kyoto	Status of $K^+pp$ search experiments
9:30 ~10:00	D. Jido	Tokyo Met.	$K^{\text{bar}}$ and $n^{\text{bar}}$ nuclei *
10:00 ~10:30	L. Fabbietti	TU München	Strangeness nuclear physics from HADES *
	Coffee		
11:00 ~11:30	J. Zmeskal	SMI, Vienna	Probing strong interaction with kaonic atoms - from DAΦNE to J-PARC
11:30 ~12:00	C. Curceanu	Frascati	Strangeness in the Universe? Low-energy kaon-nuclei interaction studies by AMADEUS at the DAΦNE collider
12:00 ~12:30	S. Gandolfi	Los Alamos	The EOS of neutron matter, and the effect of $\Lambda$ hyperons to neutron star structure

## Friday

9:00 ~9:30	S. Olsen	Seoul	Multiquark Hadrons
9:30 ~10:00	A. Hosaka	RCNP, Osaka	Charmed baryons and their interactions
10:00 ~10:30	H. Noumi	RCNP, Osaka	Strange and charm hadron physics at J-PARC
	Coffee		
11:00 ~11:30	J. Pochodzalla	Mainz	Physics of multistrange systems with antiprotons
11:30 ~12:00	L. Tang	Hampton	Future plan on investigation of $\Lambda N$ Interactions by Electroproduction at JLab
12:00 ~12:30	N. Saito	J-PARC	Present and future of J-PARC
12:30 ~13:30	A. Ramos	Barcelona	Summary

# Parallel Sessions Monday

\* Invited speaker in parallel sessions

## Session 1

<b>1a</b>	14:00 ~14:30	A. Gal *	Jerusalem	Charge symmetry breaking in $\Lambda$ hypernuclei
	14:30 ~14:50	T.O. Yamamoto	Tohoku	Study of charge symmetry breaking in $\Lambda N$ interaction via the $\gamma$ -ray spectroscopy of $^4_\Lambda\text{He}$
	14:50 ~15:05	B.F. Gibson	Los Alamos	Conjecture: a possible $nn\Lambda$ resonance
	15:05 ~15:20	M. Schäfer	NPI, Rez	Structure of light hypernuclei in the framework of Fermionic Molecular Dynamics
	15:20 ~15:35	T. Gogami	Kyoto	Missing mass spectroscopy of $\Lambda$ hypernuclei with electron beams at Jefferson Lab
	Coffee			
<b>1b</b>	16:00 ~16:30	A. Sakaguchi *	Osaka	Neutron-rich $\Lambda$ hypernuclei
	16:30 ~16:50	T. Harada	Osaka EC	Pole of the S-matrix of the $^4_\Sigma\text{He}$ hypernucleus on Riemann sheets
	16:50 ~17:05	M. Nakagawa	Osaka	Search for excited state of $\Sigma$ hypernucleus in the J-PARC E13 experiment
	17:05 ~17:20	R. Honda	Osaka	Experimental study of $YN$ interaction in the neutron rich environment produced via the $^6\text{Li}(\pi^-, K^+)X$ reaction
	17:20 ~17:35	J. Yoshida	Gifu	Scanning systems for double strangeness nuclei in nuclear emulsion
	17:35 ~17:50	S. Kinbara	Gifu	Development of PID method in nuclear emulsion

## Session 2

<b>2a</b>	14:00 ~14:30	F. Hauenstein *	Jülich	Strangeness production at COSY
	14:30 ~14:50	Y. Ilieva	South Carolina	Studies of $\Lambda$ -neutron interaction through polarization observables for final-state interactions in exclusive $\Lambda$ photoproduction off deuteron
	14:50 ~15:05	K. Hicks	Ohio	An update on a search for the pentaquark at CLAS
	15:05 ~15:20	G. Schnell	Basque	Strangeness production in $eN$ scattering at HERMES
	15:20 ~15:35	C.W. Kao	Chung Yuan CU	Kaon and pion fragmentation functions and semi-inclusive deep inelastic scattering
	Coffee			
<b>2b</b>	16:00 ~16:20	T. Mart	Indonesia	Photoproduction of hyperon and hypertriton
	16:20 ~16:40	N. Walford	Basel	Polarization observables in $\gamma p \rightarrow K^+ + \Lambda$ and $K^+ + \Sigma^0$ using circularly polarized photons on a polarized frozen spin target
	16:40 ~17:00	H. Kanda	Tohoku	The recent results of strangeness photoproduction in the threshold region at ELPH-Tohoku
	17:00 ~17:15	Y. Tsuchikawa	ELPH, Tohoku	$K^0\Lambda$ photoproduction studied with an electromagnetic calorimeter FOREST
	17:15 ~17:30	M. Kaneta	Tohoku	Study of $\Lambda$ -n interaction via FSI in $\gamma+d$ reaction

## Session 3

<b>3a</b>	14:00 ~14:20	F. Sakuma	RIKEN	Recent results of the $K^{\text{bar}}NN$ search via the in-flight $^3\text{He}(K^-, N)$ reactions at J-PARC
	14:20 ~14:40	R. Münzer	TU München	Search for the kaonic bound state $ppK^-$ in $pp \rightarrow pK^+\Lambda$ final state using partial wave analysis
	14:40 ~15:00	O. Vazquez Doce	TU München	$YN$ and $Y\pi$ correlations from kaonic absorptions in the KLOE drift chamber
	15:00 ~15:15	A.O. Tokiyasu	ELPH, Tohoku	Study of $\Sigma\pi$ invariant mass spectrum in the $d(\gamma, K^+)X$ reaction
	15:15 ~15:30	T. Yamazaki	U Tokyo	Double resonance in Dalitz plot of $M(p\Lambda)-M(K\Lambda)$ in DISTO data on $p + p \rightarrow p + \Lambda + K^+$ at 2.85 GeV
	Coffee			
<b>3b</b>	16:00 ~16:30	J. Mares *	NPI, Rez	$K^{\text{bar}}N$ interactions in the nuclear medium and $K^{\text{bar}}$ -nuclear quasi-bound states
	16:30 ~16:50	A. Dote	KEK	Double-pole structure on a prototype of kaonic nuclei " $K^-pp$ "
	16:50 ~17:05	T. Koike	Osaka EC	$K^-pp-K^{\text{bar}}np$ coupled-channel DWIA calculation for $(K^-, n)$ reaction spectrum
	17:05 ~17:20	Wai Mu Mu Phyto	Yadanabon	$\Lambda^*-p$ structure of $K^-pp$ and theoretical analyses of recent data from J-PARC
	17:20 ~17:35	Y. Akaishi	RIKEN	Possible existence of $\Lambda^*$ strangelets

# Parallel Sessions Tuesday

\* Invited speaker in parallel sessions

## Session 4

<b>4a</b>	14:00 ~14:30	N. Ishii *	RCNP, Osaka	Lattice determination of baryon-baryon potentials
	14:30 ~14:45	T. Doi	RIKEN	Towards lattice QCD baryon forces at the physical point: First results
	14:45 ~15:00	K. Morita	YITP, Kyoto	N- $\Omega$ interaction from high energy heavy ion collisions
	15:00 ~15:15	K. Sasaki	Tsukuba	Coupled channel baryon-baryon interactions on the lattice
	15:15 ~15:30	Y. Yamaguchi	YITP, Kyoto	Quark mass dependence of H-dibaryon

Coffee

<b>4b</b>	16:00 ~16:20	A. Umeya	Nippon Inst. Tech.	Productions of $^{19}_{\Lambda}F$ and the electromagnetic properties
	16:20 ~16:40	S.B. Yang	Seoul	The first $\gamma$ -ray spectroscopic study of sd-shell hypernucleus, $^{19}_{\Lambda}F$

### Topical session "Lifetime measurement of hypertriton" organized by T. Bressani

<b>4c</b>	16:40 ~16:45	T. Bressani *	Torino	Opening
	16:45 ~17:00	C. Rappold *	GSI	Status of the measurements of the lifetimes of the hydrogen hyperisotopes
	17:00 ~17:15	S. Piano *	Trieste	Measurement of the hypertriton lifetime at ALICE
	17:15 ~17:30	Y. Xu	SIAP, Shanghai	Lifetime measurement of hypertriton at STAR
	17:30 ~17:45	E. Botta *	Trino	Possible measurement of the lifetimes of the hydrogen hyperisotopes at J-PARC and TJNAF
	17:45 ~18:15	Discussion		

## Session 5

<b>5a</b>	14:00 ~14:30	L. Roca *	Murcia	On the double pole structure of the $\Lambda(1405)$
	14:30 ~14:50	K. Inoue	RCNP, Osaka	Spectroscopic study of hyperon resonance below $K^{\text{bar}}N$ threshold via $d(K^-, n)$ reaction at J-PARC
	14:50 ~15:05	S. Ohnishi	Hokkaido	Signature of $\Lambda(1405)$ in $K^- d \rightarrow \pi \Sigma n$ reaction
	15:05 ~15:20	K. Miyagawa	Okayama	Faddeev calculation of the $K^- d \rightarrow \pi \Sigma n$ reaction in the $\Lambda(1405)$ resonance region
	15:20 ~15:35	H. Kamano	RCNP, Osaka	Establishing mass spectrum of $S=-1$ hyperon resonances via a dynamical coupled-channels analysis of $K^- p$ reactions

Coffee

	16:00 ~16:15	T. Sekihara	RCNP, Osaka	$\Xi(1690)$ as a $K^{\text{bar}} \Sigma$ molecular state
	16:15 ~16:30	V. Magas	Barcelona	The $\Lambda_b \rightarrow J/\psi K$ cascade decay and the NLO chiral terms of the meson-baryon interaction
	16:30 ~16:45	E.A. Feijoo	Barcelona	The role of high spin hyperon resonances in the cascade production meson-baryon reactions
	16:45 ~17:00	L. Tolos	ICE, Barcelona	Strangeness at extremes
<b>5b</b>	17:00 ~17:30	Xiang Liu *	Lanzhou	XYZ states: Resonant and nonresonant new phenomena
	17:30 ~17:50	S. Takeuchi	Jpn Coll. Social Work	Radiative decays of the $X(3872)$ in the charmonium-molecule hybrid picture
	17:50 ~18:05	Xiaohai Liu	Tokyo Inst.Tech.	Searching for detectable effects induced by anomalous threshold singularities
	18:05 ~18:20	M. Barabanov	JINR, Dubna	Perspective study of exotics and baryons with charm and strangeness

## Session 6

<b>6a</b>	14:00 ~14:30	A. Ohnishi	YITP, Kyoto	$\Lambda$ - $\Lambda$ interaction from two-particle intensity correlation in relativistic heavy-ion collisions
	14:30 ~14:45	I. Vassiliev	GSI	Hypernuclei program at the CBM experiment
	14:45 ~15:00	A.S. Botvina	Frankfurt	Formation of hypernuclei in relativistic ion collisions
	15:00 ~15:15	S. Pulawski	Silesia	Strangness production in p+p interactions at 20, 31, 40, 80 and 158 GeV/c from NA61/SHINE at the CERN SPS

### Topical session "Hyperon puzzle in neutron stars" organized by I. Bombaci

<b>6b</b>	15:15 ~15:45	I. Bombaci *	Pisa	The hyperon puzzle in neutron stars
	15:45 ~16:15	Y. Yamamoto *	RIKEN	Hyperon mixing and universal many-body repulsion in neutron stars
		Coffee		
	16:35 ~16:50	T. Takatsuka	RIKEN	Universal 3-body force as a candidate to solve the "hyperon crisis" problem
	16:50 ~17:05	H. Togashi	RIKEN	Variational approach to neutron star matter with hyperons
	17:05 ~17:20	D. Lonardonì	Argonne	From hypernuclei to neutron stars: looking for the pieces of the puzzle
	17:20 ~17:35	T. Muto	Chiba Inst. Tech.	Interplay of kaons and hyperons in multi-strangeness systems in relativistic mean-field theory
	17:35 ~17:50	T. Miyatsu	Soongsil U	Properties of neutron stars with hyperons and quarks using relativistic Hartree-Fock approximation and MIT bag model
	17:50 ~18:05	C. Nakamoto	Suzuka Collage	Quark-Pauli effect in the three baryon-octet systems
	18:05 ~18:25	Discussion		

# Parallel Sessions Thursday

\* Invited speaker in parallel sessions

## Session 7

<b>7</b>	14:00 ~14:30	M. Isaka *	RIKEN	Impurity effects in $\Lambda$ hypernuclei
	14:30 ~14:50	K. Hagino	Tohoku	Beyond-mean-field approach to low-lying spectra of $\Lambda$ hypernuclei
	14:50 ~15:05	X.R. Zhou	Xiamen	Shape and energy spectra of hypernuclei in the framework of Skyrme-Hartree-Fock model
	15:05 ~15:20	K. Vesely	INP, Rez	Mean-field and beyond mean-field calculations of $\Lambda$ hypernuclei
	15:20 ~15:35	Y. Itonaga	Gifu	Nonmesonic weak decays and roles of strange meson exchanges in the extended model
	15:35 ~15:50	A. Pérez-Obiol	INP, Rez	Non-mesonic weak decay of the hypertriton with effective field theory

Coffee

## Session 8

<b>8</b>	14:00 ~14:20	T. Hyodo	YITP, Kyoto	Compositeness of hadrons and near-threshold dynamics
	14:20 ~14:35	T. Yoshida	Tokyo Inst. Tech.	Spectroscopy and structure of excited heavy baryons
	14:35 ~14:50	S. Yasui	Tokyo Inst. Tech.	Charm hadrons in nuclear systems
	14:50 ~15:05	S. Maeda	Tokyo Inst. Tech.	$Y_c N$ bound and resonance states in the potential model
	15:05 ~15:20	K. Suzuki	RIKEN	D meson properties in nuclear medium from QCD sum rules
	15:20 ~15:35	S. Sakai	Kyoto	The $\eta \rightarrow 3\pi$ decay in nuclear medium as a possible probe for chiral restoration
	15:35 ~15:50	K. Itahashi	RIKEN	Search for $\eta'$ mesic nuclei in GSI/FAIR

Coffee

## Session 9

### Topical session "YN scattering experiments" organized by K. Imai

<b>9</b>	14:00 ~14:05	K. Imai *	Kyoto	Opening
	14:05 ~14:20	M. Oka *	Tokyo Inst. Tech.	Theoretical aspects of YN scattering
	14:20 ~14:45	K. Miwa *	Tohoku	High statistics $\Sigma p$ scattering experiment using high intensity pion beams at J-PARC
	14:45 ~15:10	J.K. Ahn *	Korea U	Search for the H-dibaryon in $(K^-, K^*)$ reaction at J-PARC
	15:10 ~15:25	S.J. Kim	Korea BSI	Measurement of the $\Xi^- p \rightarrow \Lambda \Lambda$ Cross Sections at $p_{\Xi} = 0.2 - 0.8$ GeV/c with a scintillating fiber target
	15:25 ~15:40	Y. Ma	RIKEN	Probe short-range YN interaction via scattering experiment
	15:40 ~15:55	Discussion		

Coffee

## Poster Session

16:15 ~18:30