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J-PARC Symposium 2019

Monday 23 September 2019

Public lecture - convention hall 300 -

Moderator: YOKOYAMA, Hiromi

(10:00-11:00) 大強度陽子ビームで未来を加速する

- **Presenter: SAITO, Naohito**
Director, J-PARC Center
Professor, University of Tokyo

(11:00-12:00) なぜ私たちは宇宙で生まれたのか

- **Presenter: MURAYAMA, Hitoshi**
Professor, Kavli IPMU, University of Tokyo
University of California, Berkeley

(13:30-14:30) 物質と生命をつなぐ分子のオーケストレーション

- **Presenter: KATO, Koichi**
Professor, Exploratory Research Center
on Life and Living System,
National Institute of Natural Sciences

(14:30-15:30) 量子ビームでこれまでのタイヤ材料開発の常識が変わる
- 次世代タイヤ開発を目指して

- **Presenter: KISHIMOTO, Hiroyuki**
General Manager, Chemical Analysis
Center, Sumitomo Rubber Industries, Ltd.

(15:30-16:30) 姿を変えるニュートリノ

- **Presenter: KAJITA, Takaaki**
Director, Institute for Cosmic Ray
Research, University of Tokyo

Registration - Entrance Hall (15:00-18:00)

Ice Breaker - Restaurant Espoir (17:00-20:00)

Tuesday 24 September 2019

Registration - Entrance Hall (08:15-15:30)

Opening Session - Main Convention Hall (09:00-09:40)

Plenary A (09:40-10:30)

Chair: Naohito Saito

09:40	Story of Little Neutral Particles	OOGURI, Hiroshi (Kavli IPMU, University of Tokyo)
10:25	announcement	

Plenary B (10:50-11:35)

Chair: Toshiji Kanaya

10:50	Science for Energy: The Role of Large-Scale Scientific User Facilities	KUNG, Harriet (Office of Science, Department of Energy, USA)
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guest address (11:35-11:55)

Lunch (11:55-13:30)

Panel Discussion - Main Convention Hall (13:30-14:50)

13:30	Role of science in societies, role of Japan in the world	- Chair: SAITO, Naohito (J-PARC) - Panelists OOGURI, Hiroshi (Kavli IPMU, University of Tokyo) NAKAZAWA, Shinichi (Religious historian, Meiji University) WARK, David others
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Photo Session (14:50-15:00)

Ceremony: 10-year Anniversary of J-PARC (15:30-17:30)

Banquet - Hotel Grand Shinonome (18:30-20:30)

Wednesday 25 September 2019

Plenary C - Main Convention Hall (08:45-10:20)

Chair: Kazuhisa Kakurai / Masatoshi Futakawa

08:45	Emergent Phenomena of Topological Magnets	TOKURA, Yoshinori
09:30	Realisation of a New Research Infrastructure in Belgium: MYRRHA	ABDERRAHIM, Hamid
10:15	Announcement	

Coffee break (10:20-10:40)

Parallel Session 1 - (10:40-12:30)

PN review session: Review session of Particle-Nuclear Physics at J-PARC - Convention Hall 200 (10:40-12:30)

Chair: Tsutomu Mibe (KEK)

10:40	Neutrino Experiments at J-PARC (invited)	KUZE, Masahiro (Tokyo Institute of Technology)
11:15	Theoretical overview of Lepton Flavor Violation (invited)	SATO, Joe (Saitama University)
11:50	Strangeness and Hadron Physics at J-PARC (invited)	OKA, Makoto (JAEA)

MLF-MT: Magnetism - Room 101 (10:40-12:30)**Chair: Kazuhisa Kakurai (CROSS)**

10:40	Spin-hedgehog lattice states in cubic chiral magnets $\text{MnSi}_{1-x}\text{Ge}_x$ investigated by small- and wide-angle neutron scattering and neutron spin echo spectroscopy (invited)	NAKAJIMA, Taro (The University of Tokyo, RIKEN)
11:10	Fractionalized Spin Excitations in Spin-1/2 Triangular- and Kagome-Lattice Antiferromagnets (invited)	TANAKA, Hidekazu (Tokyo Institute of Technology)
11:40	Hybridized magnon with orbital and lattice in multiferroics $\text{Ba}_2\text{MnGe}_2\text{O}_7$	MASUDA, Takatsugu (The University of Tokyo)
12:00	Magnetism in Kagome Antiferromagnet $\text{MgMn}_3(\text{OH})_6\text{Cl}_2$	BHUIYAN, Md. Mahbubur Rahman (Saga University)

MLF-FP: Future Plan of Neutron and Muon facilities - Room 102 (10:40-12:30)**Chair: Mitsuhiro Shibayama (The University of Tokyo)**

10:40	Plans for a Second Target Station at the Spallation Neutron Source (invited)	MURDOCH, Graema R. (Oak Ridge National Laboratory)
10:50	ISIS - from TS1 to TS2 to ISIS-II (invited)	MCGREEVY, Robert (Science & Technology Facilities Council, Rutherford Appleton Laboratory)
11:00	Future plans for the European Spallation Source (invited)	KENNEDY, Shane (ESS-ERIC)
11:10	Institute Laue Langevin - Endurance programme (invited)	ESTRADE, Jérôme (Institute Laue Langevin)
11:20	Expansion Plans for the OPAL Reactor (invited)	SCHULZ, Jamie (ANSTO)
11:30	Towards to the construction of J-PARC/MLF 2nd Target Station (invited)	SHIMOMURA, Koichiro (J-PARC Center) KANAYA, Toshiji (J-PARC Center)
11:40	Future Developments of the SpS Facility at the Paul Scherrer Institute (invited)	AMATO, Alex (Paul Scherrer Institute)
11:50	Future plans of the TRIUMF Centre for Molecular and Materials Science (invited)	KOJIMA, Kenji (TRIUMF)
12:00	Panel Discussion	

PN-DDA: Detector development session A - Room 202 (10:40-12:20)

Chair: TBA

10:40	The Accelerator Neutrino Neutron Interaction Experiment (ANNIE) (invited)	SVOBODA, Robert (UC Davis)
11:05	The upgrade of the KOTO Cesium Iodide calorimeter for the separation of gamma and neutron (invited)	SHIMIZU, Nobuhiro (Osaka University)
11:30	Neutron beam monitor for the high-intensity neutron total diffractometer NOVA (invited)	OHSHITA, Hidetoshi (KEK/J-PARC)
11:55	Time Projection Chamber "HypTPC" for the hadron spectroscopy at J-PARC (invited)	ICHIKAWA, Yudai (JAEA)

CRY: Cryogenics for high intensity beam - Room 303 (10:40-12:10)

Chair Yasuhiro Makida

10:40	The LHC Cryogenics System at CERN and Operational Experience from the last 4-years physics Run2 (2015-2018)(invited)	DELIKARIS, Dimitri (CERN)
11:10	Cryogenic activities in RIKEN RI beam factory (invited)	OKUNO, Hiroki (RIKEN, Nishina Center)
11:40	Licensing and current status of the High Current Superconducting Cavities for the IFMIF Prototype Accelerator (invited)	KASUGAI, Atsushi (QST, Rokkasho Fusion Institute)

ACC-IP1: High Intensity / High power Accelerator 1 - Room 405 (10:40-12:30)

Chair: Christopher Prior (STFC/RAL)

10:40	Operation and Upgrade of J-PARC Accelerators (invited)	HASEGAWA, Kazuo (J-PARC Center)
11:10	Experience with AGS High Intensity Protons Operation (invited)	HUANG, Haixin (BNL)
11:40	Current status and future upgrade plans of SNS (invited)	SHISHLO, Andrei P. (ORNL, Oak Ridge)
12:10	J-PARC Main Ring Upgrade toward High Repetition Rate Operation	KURIMOTO, Yoshinori (KEK/J-PARC)

Lunch (12:30-13:30)

Parallel Session 2 - (13:30-15:20)**MLF-SP: MLF Review Session "Breakthrough with muons & neutrons" - Convention Hall 200 (13:30-15:10)****Chair: Jun Sugiyama (CROSS)**

13:30	Topological magnetic excitations and magnetic anisotropy in ferromagnetic CrI ₃ (invited)	DAI, Pencheng (Rice University)
13:55	Black is the new green – making carbon battery anodes from biowaste (invited)	DREW, Alan (Queen Mary University of London)
14:20	Insights into caloric materials: a neutron scattering study (invited)	LI, Bing (Chinese Academy of Sciences)
14:45	Dynamics of macromolecules: state of the art and future perspectives (invited)	RICHTER, Dieter (Jülich Center for Neutron Science)

ADS: Accelerator Driven Nuclear Transmutation System - Room 102 (13:30-15:20)**Chair: Masatoshi Futakawa (J-PARC. JAEA)**

13:30	Huizhou Nuclear Research Center in 2019 (invited)	ZHAN, Wenlong (Institute of Modern Physics, CAS)
14:05	Irradiation Experiments on ²³⁷ Np and ²⁴¹ Am by Accelerator-Driven System at Kyoto University Critical Assembly (invited)	PYEON, Cheol Ho (Kyoto Univ.)
14:40	A Plan of Materials Irradiation Facility at J-PARC for Development of ADS and High-power Accelerator Facilities	MAEKAWA, Fujio (J-PARC Center, JAEA)
15:00	Status of LBE studies and experimental plan at JAEA	SAITO, Shigeru (J-PARC Center, JAEA)

PN-NP1: Neutrino Physics session 1 - Room 201 (13:30-15:20)

Chair: Ken Sakashita (KEK)

13:30	The Precision Reactor Oscillation and Spectrum Experiment (invited)	MUMM, Pieter (National Institute of Standards and Technology)
13:55	Review of sterile neutrino experiments with accelerator neutrinos (invited)	MARUYAMA, Takasumi (KEK)
14:20	T2K future prospects with J-PARC neutrino beam and near detector upgrades (invited)	MATSUBARA, Tsunayuki (KEK)
14:45	Neutrino oscillation and matter-antimatter asymmetry of universe (invited)	YIN, Wen (KAIST)

PN-FK: Flavor Physics session (Kaon) (13:30-15:20) - Room 202 (13:30-15:20)

Chair: Koji Shiomi (KEK)

13:30	Kaon - theoretical overview (invited)	YAMAMOTO, Kei (University of Zurich / Hiroshima University)
14:00	Recent Result on the Measurement of $K_L \rightarrow \pi^0 \nu \bar{\nu}$ at the J-PARC KOTO Experiment (invited)	LIN, Chieh (National Taiwan University)
14:20	Search for lepton universality violation in J-PARC E36 Experiment (invited)	SHIMIZU, Suguru (Osaka University)
14:40	Kaon physics in Europe (invited)	KOVAL, Michal (Charles University)

PN-SH1: Strangeness-Hadron Physics joint - Room 303 (13:30-15:20)

Chair: Hiroaki Ohnishi (Tohoku University)

13:30	Kaonic Nuclear Bound State " K -pp" Observation and Possible Future Plan (invited)	IWASAKI, Masahiko (RIKEN)
14:00	Hadron physics with photon beam (invited)	NIIYAMA, Masayuki (Kyoto Sangyo University)
14:25	Heavy Flavor Hadron Physics at Belle and Belle II (invited)	MIYABAYASHI, Kenichi (Nara Women's University)
14:50	Exclusive Hard Processes for Studying Hadron Structures at J-PARC (invited)	CHENG, Wen-Chen (Academia Sinica)

ACC-IP2: High Intensity / High power Accelerator 2 - Room 405 (13:30-15:00)

Chair: Hidetomo Oguri (J-PARC Center)

13:30	Beam Commissioning Status and Future Plans of FRIB (invited)	IKEGAMI, Masanori (FRIB/MSU)
14:00	Beam Commissioning Status and Future Plans of LIPAc (invited)	SAKAMOTO, Keishi (Rokkashi Fusion Institute, QST)
14:30	Status and Plans of the ESS Neutron Source (invited)	GAROBY, Roland (European Spallation Source ERIC)

Coffee break (15:20-15:40)

Parallel Session 3 - (15:40-17:30)

MLF-OV: MLF Overview - Convention Hall 200 (15:40-17:30)

Chair: Robert McGreevy (Rutherford Appleton Laboratory)

15:40	Current Status in J-PARC MLF (invited)	KANAYA, Toshiji (J-PARC Center)
16:10	Current status of Muon Science Facility (invited)	KAWAMURA, Naritoshi (KEK-IMSS)
16:40	Present Status of Neutron Source at J-PARC MLF (invited)	HAGA, Katsuhiko (J-PARC Center)
17:10	J-PARC MLF Users Society (invited)	KUBO, Kenya (International Christian University)

PN-DDB: Detector development session B - Room 201 (15:40-17:30)

Chair: TBA

15:40	Recent DAQ developments at PSI (invited)	RITT, Stefan (PSI)
16:05	High density positron detector <i>Kalliope</i> and its applications at J-PARC muon and neutron measurements (invited)	KOJIMA, Kenji (TRIUMF)
16:30	Positron Tracking Detector for Muon g-2/EDM Experiment at J-PARC (invited)	YOSHIOKA, Tamaki (Kyushu University)
16:55	COMET Detectors to search for a muon to electron conversion (invited)	FUJII, Yuki (Monash University)

MLF/PN: Fundamental physics of neutron and muon - Room 202 (15:40-17:30)

Chair: Masaharu Aoki (Osaka University)

15:40	Muon g-2 in Two Higgs Doublet Models at The LHC (invited)	TAKEUCI, Michihisa
16:00	The Muon g-2 Experiment at Fermilab (invited)	KESHAVARZI, Alex (The University of Mississippi)
16:20	J-PARC muon g-2/EDM experiment (invited)	SATO, Yutaro (KEK)
16:40	Muonium Hyperfine Structure Measurement in a Zero/High Magnetic Field at J-PARC (invited)	NISHIMURA, Shoichiro (KEK)
17:00	Laser spectroscopy of the 1s hyperfine splitting energy of muonic hydrogen for the determination of proton Zemach radius (invited)	ISHIDA, Katsuhiko (RIKEN)

PN-NA: Discussion of new attempts in particle and nuclear physics experiments - Room 303 (15:40-17:25)

Chair: Yoshiaki Fujii (KEK)

15:40	New frontier with Laser spectroscopy of Muonium (invited)	YOSHIMURA, Koji (Okayama University)
16:15	Review of Dark Photon Phenomenology (invited)	SHIMOMURA, Takashi (Miyazaki University)
16:50	Dark photons (invited)	KOZLOV, Gennady (JINR)

ACC-IP3: High Intensity / High power Accelerator 3 - Room 405 (15:40-17:10)

Chair: Roland Garoby (European Spallation Source ERIC)

15:40	Status and Future Projects of the PSI High Intensity Proton Accelerator (invited)	KISELEV, Daniela C. (Paul Scherrer Institut)
16:10	The status and upgrade plan of CSNS (invited)	WANG, Sheng (CSNS/IHEP)
16:40	The FAIR Project: Realization including industrial contractors and status (invited)	PYKA, Niels (GSI)

Poster Session - 2F Concourse (17:40-19:40)

Thursday 26 September 2019

Plenary D - Main Convention Hall (08:45-10:20)

Chair: Tadashi Koseki/ Toshiji Kanaya

08:45	Physics and Energy	JAFFE, Robert L.
09:30	Exploring the origins of the Earth and life	HIROSE, Kei
10:15	announcement	

Coffee break (10:20-10:40)

Parallel Session 4 - (10:40-12:30)

ACC/PN-JS: Accelerator and Particle-Nuclear Physics joint session - Convention Hall 200 (10:40-12:25)

Chair: Takeshi Nakadaira (KEK)

10:40	Recent slow extraction beam loss reduction improvements at the CERN SPS (invited)	FRASER, Matthew Alexander. (CERN)
11:15	Status of the ESSnuSB Design Study (invited)	EKELOF, Tord (Uppsala University)
11:50	Highly intense muon beam and novel high-brightness muon beam development at PSI (invited)	PAPA, Angela (PSI)

MLF-SC: Strongly Correlated Electron System - Room 101 (10:40-12:30)

Chair: Tadashi Adachi (Sophia University)

10:40	Hybridization and Decay of Magnetic Excitations in Two-Dimensional Triangular Lattice Antiferromagnets (invited)	PARK, Je-Geun (Seoul National University)
11:10	Broken time-reversal symmetry in superconducting $\text{Pr}_{1-x}\text{La}_x\text{Pt}_4\text{Ge}_{12}$ (invited)	SHU, Lei (Fudan University)
11:40	Spin orbit coupling and "preferred" magnetic excitations in iron based superconductors (invited)	LI, Yuan (Peking University)
12:10	Hole and Electron Doping Effect on the Magnetism in the Ce Free Superconductor $\text{T}'\text{-La}_{1.8-x}\text{Eu}_{0.2}\text{Sr}_x\text{CuO}_{4-y}\text{F}_y$	KAWAMATA, Takayuki (Tohoku University)

MLF-IN: Industrial application - Room 102 (10:40-12:30)**Chair: Jun-ichi Suzuki (CROSS)**

10:40	Muon- and Neutron-Induced Single-Event Upsets in 65-nm Static Random Access Memories (invited)	WATANABE, Yukinobu (Kyushu University)
11:10	Research of Energy Materials with Muons in J-PARC (invited)	UMEGAKI, Izumi (Toyota Central Research and Development Laboratories, Inc)
11:40	Magnetic Field Dependence on Crystallization Process of FINEMET® Nano-crystalline Alloy Detected by μ SR Method	OHTA, Motoki (Hitachi Metals)
12:00	Structural Analysis of Polybutadienes with Urethane Linkages by Small-Angle Neutron Scattering	SHODA, Yasuhiro (Bridgestone Corporation)

MLF-MO: Moderator for high power neutron source - Room 201 (10:40-12:30)**Chair: Yujiro Ikeda**

10:40	ESS Path to Low-Dimensional Moderators and Beyond (invited)	TAKIBAYEV, Alan (ESS-ERIC)
11:10	Moderator Choices for SNS Second Target Station (STS) (invited)	GALLMERIER, Franz X. (SNS, Ork Ridge National Laboratory)
11:40	The pelletized cold neutron moderators at the IBR-2 reactor (invited)	KULLIKOV, Sergey (JINR, FLNP)
12:10	Recent progress of J-PARC moderator development	TESHIGAWARA, Makoto (J-PARC Center)

MLF-TE: New technology for Neutron and Muon Science - Room 304 (10:40-12:30)**Chair: Masahiro Hino (Kyoto University)**

10:40	New experimental opportunities at the ILL -NSE upgrades (invited)	FARAGO, Bela (Institute Laue Langevin)
11:10	Neutron focusing mirror development using metallic substrate (invited)	YAMAGATA, Yutaka (RIKEN)
11:40	Ultra Slow Muon Generation and Its Application for Transmission Muon Microscopy at J-PARC Muon Facility, MUSE (invited)	MIYAKE, Yasuhiro (J-PARC Center/KEK)
12:10	Negative muon spin spectroscopy for the future materials science	SUGIYAMA, Jun (CROSS)

MLF-DE: Deuteration - Room 406 (10:40-12:40)**Chair: Hiroyuki Aoki (J-PARC Center)**

10:40 (invited)	Development of Continuous Flow Direct Deuterium Labeling Methods	SAJIKI, Hironao (Gifu Pharmaceutical University)
11:10	Old and New Methods in Deuteration Chemistry: Chemo-enzymatic Synthesis at the European Spallation Source (invited)	LEUNG, Anna (ESS-ERIC)
11:40	Deuteration for Neutron Scattering (invited)	LI, Peixun (ISIS Neutron and Muon Source, Rutherford Appleton Laboratory)
12:10 (invited)	Structural characterization of the circadian clock protein complexes composed of KaiA, KaiB and KaiC by integrative structural approaches	YAGI, Hirokazu (Nagoya City University)

Lunch (12:30-13:30)**Parallel Session 5 - (13:30-15:20)****MLF-IM: imaging - Room 101 (13:30-15:20)****Chair: Takenao Shinohara (J-PARC Center)**

13:30	Toward new frontiers: Encounter and synergy of state-of-the-art astronomical detectors and exotic quantum beams (invited)	TAKAHASHI, Tadayuki (IPMU, The University of Tokyo)
14:00	3D Bragg-Edge Elastic Strain Tomography (invited)	WENSRICH, Christopher (University of Newcastle)
14:30	Optimization of crystal growth through in-situ energy-resolved neutron imaging (invited)	PERRODIN, Didier (Lawrence Berkeley National Laboratory)
15:00	Japanese-sword Crystallographic Study Based on Pulsed Neutron Imaging at J-PARC	OIKAWA, Kenichi (J-PARC Center)

MLF-DA: Data analysis - Room 102 (13:30-15:10)**Chair: Toshiya Otomo (KEK-IMSS)**

13:30	A Viscoelastic Hydrodynamics Theory of the Collective Density Fluctuations in Liquids and Glasses (invited)	ZHANG, Yang (University of Illinois)
14:00	Seeing atomic and molecular level dynamics in liquids (invited)	IWASHITA, Takuya (Oita University)
14:30	Real-Time and Real-Space Analysis of Coherent QENS for Liquid Metal Antimony	KAWAKITA, Yukinobu (J-PARC Center)
14:50	Electrostatic Potential Mapping by Maximum Entropy Method based on Mott-Bethe relations	ISHIKAWA, Yoshihisa (CROSS)

PN-CS: Neutrino cross section and hadron - Room 201 (13:30-15:20)**Chair: Atsuko K. Ichikawa (Kyoto University)**

13:30	Hadron and Nuclear Theory for Oscillation Experiments (invited)	ALVAREZ-RUSO, Luis (IFIC)
13:55	T2K ND280 cross section results and future prospects (invited)	MAHN, Kendall (Michigan State University)
14:20	Cross Section Results from the MicroBooNE Experiment (invited)	HILL, Colton (Chiba University)
14:45	Possible hadron physics with neutrino beams (invited)	IMAI, Kenichi (JAEA)

PN-FM: Flavor Physics session (muon) - Room 202 (13:30-15:10)**Chair: TBA**

13:30	Theory of Charged Lepton Flavour Violation (invited)	PASSEMAR, Emilie (Indiana University/JLab)
13:50	The MEG-II experiment at PSI (invited)	SIGNORELLI, Giovanni (INFN)
14:10	The COMET experiment: search for muon-to-electron conversion (invited)	MORITSU, Manabu (KEK)
14:30	Mu2e at Fermilab (invited)	RAY, Ronald (FNAL)
14:50	An experiment to search for μ -e conversion by using a pulsed proton beam from J-PARC RCS – DeeMe (invited)	NAGAO, Daiki (Osaka University)

PN-SH2: Strangeness-Hadron physics joint session 2 - Room 303 (13:30-15:20)

Chair: Toshiyuki Takahashi (KEK)

13:30	Spectroscopic Study of Lambda Hypernuclei at J Lab (invited)	NAKAMURA, Satoshi (Tohoku University)
13:55	Recent result and future plan of hypernuclear γ ray spectroscopic experiment at J-PARC (invited)	YAMAMOTO, Takeshi (JAEA)
14:15	J-PARC E07: Systematic study of double strangeness system with hybrid emulsion method (invited)	YOSHIDA, Junya (JAEA)
14:35	High statistics Σp scattering experiment at J-PARC (invited)	MIWA, Koji (Tohoku University)
14:55	Status and perspectives of hypertriton lifetime determination in ultra-relativistic heavy ion collisions (invited)	BUFALINO Stefania (DISAT-Politecnico di Torino)

MLF-TA: High power spallation neutron & muon target - Room 304 (13:30-15:20)

Chair: Makoto Teshigawara (J-PARC Center)

13:30	The Construction of the ESS Target Station - Current Progress and Challenges (invited)	LINANDER, Rikard (ESS-ERIC)
14:00	Challenges in the Development and Operation of the MW-class SNS Mercury Target (invited)	RIEMER, Bernard (Oak Ridge National Laboratory)
14:30	Progress and challenges of the PSI Meson targets and relevant systems (invited)	KISELEV, Daniela (Paul Scherrer Institut)
15:00	Present Status of Muon Production Target at J-PARC MLF MUSE (invited)	MAKIMURA, Shunsuke (J-PARC Center/KEK-IMSS)

SAF: Safety for Intensity Frontier - Room 404 (13:30-15:00)**Chair: Hirohito Yamazaki (J-PARC Center, KEK)**

13:30	Radiation evaluation at RIBF (invited)	TANAKA, Kanenobu (RIKEN Nishina Center)
14:00	Behavior of gaseous radionuclides produced in the gold target at the J-PARC Hadron Experimental Facility	BESSHO, Kotaro (Safety Division, J-PARC Center)
14:20	Experimental study on neutron attenuation for 24 GeV/c proton beam on a thick Cu target	SANAMI, Toshiya (Radiation Science Center, KEK)
14:40	Behavior of tritium release from a stainless vessel of the mercury target as a spallation neutron source	KASUGAI Yoshimi (Safety Division, J-PARC Center)

ACC-IP4: High Intensity/High Power Accelerator 4 - Room 405 (13:30-15:20)**Chair: Masahito Yoshii (KEK)**

13:30	Status of FNAL and PIP-II project (invited)	MERMINGA, Lia (Fermilab)
14:00	LHC status and the HL-LHC project (invited)	GILARDONI, Simone (CERN)
14:30	ISIS upgrade and the feasibility study (invited)	MACHIDA, Shinji (STFC Rutherford Appleton Laboratory)
15:00	J-PARC Contributions to LHC Injector Upgrade Project	OHMORI, Chihiro (KEK/J-PARC Center)

MLF-SO: Softmatter - Room 406 (13:30-15:20)**Chair: Hideki Seto (KEK-IMSS)**

13:30	QENS and Soft Matter - Opportunities for the future (invited)	SAKAI, Victoria Garcia (ISIS Neutron and Muon Facility, STFC)
14:00	Interfacial Structure of Thin Polyelectrolyte Films by Neutron Reflectivity (invited)	TANAKA, Keiji (Kyushu University)
14:30	Dynamics of Ring on Polymer in Polyrotaxane Investigated by Quasi-elastic Neutron Scattering and MD simulation (invited)	MAYUMI, Koichi (The University of Tokyo)
15:00	Molecular dynamics in rubber probed by muon spin relaxation	TAKESHITA, Soshi (KEK-IMSS)

Coffee break (15:20-15:40)

Parallel Session 6 - (15:40-17:30)

MLF-RS: Residual Stress, Engineering Materials - Room 101 (15:40-17:30)

Chair: Yo Tomota (AIST)

15:40	In-situ neutron diffraction study of cooperative deformation in high-entropy alloys at ultralow temperatures (invited)	WANG, Xun-Li (City University of Hong Kong)
16:10	Dynamic Ferrite Transformation Behavior Analyzed by In-Situ Neutron Diffraction during Thermomechanical Processing (invited)	SHIBATA, Akinobu (Kyoto University)
16:40	Deformation behavior of directionally solidified Mg-LPSO alloy studied by in-situ techniques	DROZDENKO, Daria (Kumamoto University)
17:00	Archaeometallurgy Study of Japanese Sword Using Neutron Diffraction	HARJO, Stefanus (J-PARC Center)

MLF-ES: Energy Science - Room 102 (15:40-17:30)

Chair: Wataru Higemoto (JAEA)

15:40	Ionomer Films for Fuel Cells Cast on Different Substrates Analyzed by In-Situ Neutron Reflectometry under Controlled Temperature and Humidity (invited)	INUKAI, Junji (University of Yamanashi)
16:10	Hydrogen absorption and desorption reactions of hydrides studied by neutron diffraction and inelastic neutron scattering (invited)	SATO, Toyoto (Tohoku University)
16:40	Neutrons & Muons for Future Energy Materials	MANSSON, Martin
17:10	Diffusion dynamics of hydrogen atoms in PdPt nanoparticles studied by quasielastic neutron scattering	AKIBA, Hiroshi (University of Tokyo)

PN-HP: Physics at J-PARC high-momentum beamline and hadron hall extension - Room 201 (15:40-17:30)

Chair: Kyoichiro Ozawa (KEK)

15:40	Measurement of the spectral change of vector mesons in nuclei at the high-momentum beamline in J-PARC Hadron Experimental Facility (invited)	YOKKAICHI, Satoshi (RIKEN)
16:10	Prospects on fixed-target heavy ion physics opportunities at CERN (invited)	USAI, Gianluca (University of Cagliari)
16:40	Heavy Ion Acceleration Plan at J-PARC (invited)	MIAKE, Yasuo (University of Tsukuba)
17:05	Hadron spectroscopy with high-momentum hadron beams (invited)	SHIROTORI, Kotaro (RCNP, Osaka University)

PN-NP2: Neutrino Physics session 2 - Room 202 (15:40-17:30)

Chair: Takashi Kobayashi (KEK)

15:40	Latest Oscillation Results Combining Neutrino and Antineutrino Data from the NOvA Experiment (invited)	BAIRD, Michael (University of Virginia)
16:10	The NOvA Deep Learning Program: New developments, successes, lessons, and prospects for further improving physics analyses (contributed)	PSIHAS, Fernanda (University of Texas)
16:30	The Hyper-Kamiokande project (invited)	KONAKA, Akira (TRIUMF)
17:00	Technical achievements, challenges of DUNE (invited)	MAHN, Kendall (Michigan State University)

PN/MLF-SY: Symmetry in particle and nuclear physics - Room 303 (15:40-17:20)

Chair: Kenji Mishima (KEK)

15:40	Fundamental Physics using Slow Neutrons (invited)	SHIMIZU, Hirohiko (Nagoya University)
16:05	NOPTREX: Search for T Violation in Neutron-Nucleus Resonance Reactions (invited)	SNOW, Mike (Indiana University/CEEM)
16:30	Searches for the Neutron Electric Dipole Moment (invited)	LINDNER, Thomas (TRIUMF)
16:55	Precise Neutron Lifetime Measurement Using Pulsed Neutron Beams at J-PARC (invited)	SUMI, Naoyuki (Kyushu University)

PN-RA: Neutrino & Hadron Target, Radiation Damage/Thermal Shock Studies - Room 304 (15:40-17:30)

Chair: Shunsuke Makimura (J-PARC Center/KEK-IMSS)

15:40	Targetry and beam intercepting devices activities at CERN: technological challenges, beam irradiation tests and radiation damage considerations (invited)	CALVIANI, Marco (CERN)
16:10	Challenges on Target Systems at CERN: Thermal Shock Studies at CERNs HiRadMat Facility (invited)	KADI, Yacine (CERN)
16:40	Targets and Windows for Next Generation Long-Baseline Neutrino Experiments (invited)	ISHIDA, Taku (J-PARC)
17:05	Target and Window Upgrades at J-PARC Hadron Experimental Facility (invited)	TAKAHASHI, Hitoshi (KEK)

MLF-EA: Elemental Analysis, Nuclear Data - Room 404 (15:40-17:10)

Chair: Koichiro Shimomura (KEK-IMSS)

15:40	Neutron Capture Reaction Data Measurement of Minor Actinides for Development of Nuclear Transmutation Systems (invited)	KATABUCHI, Tatsuya (Tokyo Institute of Technology)
16:10	High precision spectroscopy of muonic X-rays with a superconducting TES detector at J-PARC (invited)	AZUMA, Toshiyuki (RIKEN)
16:40	Activities of neutron resonance absorption imaging in J-PARC (invited)	KAI, Tetsuya (J-PARC)

ACC-LC: High Luminosity Collider - Room 405 (15:30-17:30)

Chair: Yuki Yoshi Onishi (KEK)

15:30	Realizing high luminosity at SuperKEKB (invited)	MITSUKA, Gaku (KEK)
16:00	A brief introduction to the Future Circular Collider (FCC) project (invited)	OIDE, Katsunobu (CERN)
16:30	Accelerator physics challenges for high luminosity frontier at CEPC (invited)	YU, Chenghui (Institute of High Energy Physics)
17:00	Current Status of the ILC (invited)	MICHIZONO, Shinichiro (KEK)

MLF-BI: Biology - Room 406 (15:40-17:30)

Chair: Masaaki Sugiyama (Kyoto University)

15:40	A view on protein internal dynamics using Neutron Spin Echo Spectroscopy (invited)	BIEHL, Ralph (Forschungszentrum Julich GmbH)
16:10	Neutron and high-resolution X-ray structural studies of cellulases (invited)	IGARASHI, Kiyohiko (The University of Tokyo)
16:40	Muon stopping sites and stopping states in proteins (invited)	SUGAWARA, Yoko (Toyota Physical and Chemical Research Institute/Kitasato University)
17:10	Subunit dynamics in α -crystallin through deuteration-assisted small-angle neutron scattering	INOUE, Rintaro (Kyoto University)

Coffee break (17:30-17:45)

Closing Session - Main Convention Hall (17:45-18:15)

Chair: TBA

Friday 27 September 2019

J-PARC Tour: meet at Epochal (08:00-08:30)

Tsukuba → Tokai (08:30-09:45)

Group A (10:00-12:00)

MLF - Accelerator - Hadron - Neutrino

Group B (10:00-12:00)

Hadron - Neutrino - Accelerator - MLF

Group C (10:00-12:00)

Accelerator - MLF - Hadron - Neutrino

Tokai → Tsukuba (12:15-13:30)