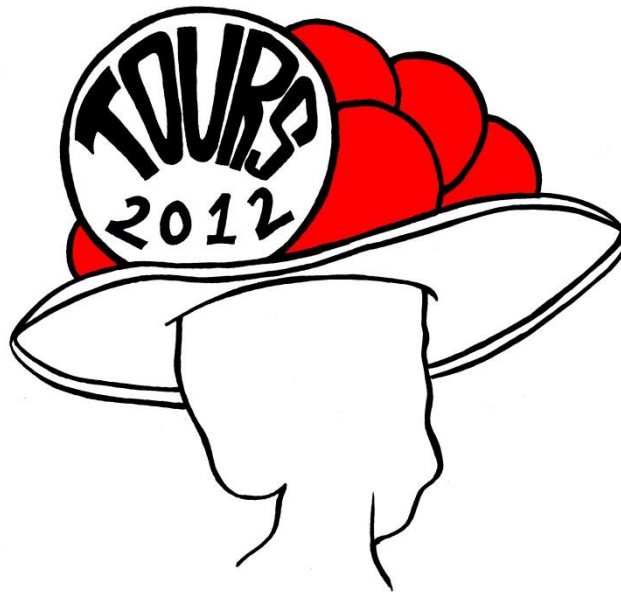


Scientific Programme



Mini School Lectures

Sunday, September 2nd

Room K1

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| 9:00 | Superheavy element research Sophie Heinz, <i>GSI, Darmstadt</i> |
| 10:30 | Coffee break |
| 11:00 | Extreme energy cosmic rays: at the doorway to particle astronomy Andreas Haungs, <i>KIT</i> |
| 12:30 | Lunch break |
| 14:00 | Hypernuclei - bridging the gap between quarks and stars Josef Pochodzalla, <i>Universität Mainz</i> |
| 15:30 | Coffee break |
| 16:00 | Photonuclear physics Norbert Pietralla, <i>TU Darmstadt</i> |

Plenary SHE **Monday, September 3rd**
Room K1

- 9:00 **Results and plans of experiments on superheavy nuclei at SHIP**
Sigurd Hofmann, *GSI, Darmstadt*
- 9:30 **New insights into the discoveries of elements 113, 115, 117**
Roman Sagaidak, *JINR, Dubna*
- 10:00 **Fusion-fission study at JAEA for heavy element synthesis**
Katsuhisa Nishio, *JAERI, Tokai*
- 10:30 Coffee break
- 11:00 **Theoretical description of masses of superheavy nuclei**
Adam Sobiczewski, *NCNR, Warsaw*
- 11:30 **Synthesis of new heavy and superheavy isotopes in multi-nucleon transfer reactions**
Sophie Heinz, *GSI, Darmstadt*
- 12:00 **In-beam spectroscopy of heavy elements**
Mikael Sandzelius, *JYFL, Jyväskylä*

Plenary EECR **Monday, September 3rd**
Room K1

- 14:00 **Measurement of extreme-energy cosmic rays; an overview**
Masaki Fukushima, *University of Tokyo*
- 14:30 **Fundamental physics at extreme high energies**
Michael Kachelriess, *NTNU*
- 15:00 **Recent accelerator constraints on the air shower MC models**
Takashi Sako, *Nagoya University*
- 15:30 Coffee break
- 16:00 **Extragalactic propagation of ultrahigh energy cosmic-rays**
Denis Allard, *APC, CNRS/IN2P3*
- 16:30 **Future of extreme-energy cosmic rays**
Andreas Haungs, *KIT*

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| Plenary | NAP | Tuesday, September 4th Room K1 |
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- 9:00 **s-process in massive stars**
Raphael Hirschi, *Keele University*
- 9:30 **r-process from type-II supernovae**
Shinya Wanajo, *NAOJ, Tokyo*
- 10:00 **Measurements of the $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ reaction at low energies**
Moshe Gai, *Yale and University of Connecticut*
- 10:30 Coffee break
- 11:00 **Nuclear physics aspects of p-process nucleosynthesis**
Sotirios Harissopulos, *NCSR Demokritos*
- 11:30 **Compiling the nuclear reaction rates of astrophysical interest**
Kohji Takahashi, *GSI, Darmstadt*
- 12:00 **Inhomogeneous nuclear matter and equation of state**
Toshiki Maruyama, *JAEA, Tokai*

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| Parallel | NAP | Tuesday, September 4th Room K1 |
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- 14:00 **Evolution and nucleosynthesis of massive stars**
Sylvia Ekström, *University of Geneva*
- 14:25 **Experimental efforts along the valley of stability**
Frank Strieder, *Universität Bochum*
- 14:50 **Constraining electron-capture rates in late stellar evolution with data from charge-exchange experiments**
Remco Zegers, *Michigan State University*
- 15:15 **beta-decay study of the r-process nuclei and future perspective**
Shunji Nishimura, *RIKEN Institute, Wako, Saitama*
- 15:40 Coffee break
- 16:10 **Anomaly in $^6\text{Li}(p,\gamma)^7\text{Be}$ reaction at low energies**
Jianjun He, *IMP, Lanzhou*
- 16:35 **Direct mass measurements at FRS-ESR**
Baohua Sun, *Universität Gießen*
- 17:00 **The $^{40}\text{Ca}(\alpha,\gamma)^{44}\text{Ti}$ reaction studied by activation**
Konrad Schmidt, *Helmholtz-Zentrum Dresden Rossendorf*

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| Parallel | SHE | Tuesday, September 4th Room K2 |
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- 14:00 **Experimental chemical investigations of superheavy elements**
Andreas Türler, *PSI, Villigen*
- 14:30 **Superheavy element research at TASCA**
Jadambaa Khuyagbaatar, *Helmholtz-Institute, Mainz*
- 15:00 **Nuclear structure investigations of the heaviest elements at SHIP – GSI**
Fritz Peter Heßberger, *GSI, Darmstadt*
- 15:30 Coffee break
- 16:00 **Spectroscopy of transfermium elements at Dubna: results and perspectives**
Alexandr Yeremin, *JINR, Dubna*
- 16:30 **Dynamical approach to fusion-fission process producing superheavy elements**
Yoshihiro Aritomo, *JINR, Dubna*
- 17:00 **High-precision measurements of ground state properties of the heaviest elements with SHIPTRAP**
Michael Block, *GSI, Darmstadt*

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| Parallel | ECCR | Tuesday, September 4th Room K3 |
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- 14:00 **Energy spectrum of EECRs**
Yoshiki Tsunesada, *Tokyo Institute of Technology*
- 14:25 **Mass composition measurements of extreme-energy cosmic rays**
Jose Bellido, *University of Adelaide*
- 14:50 **Theory of gamma-ray, neutrino and EECR connection**
Kumiko Kotera, *IAP, Paris*
- 15:15 **Cosmic ray acceleration to ultra-high energies**
Frank Rieger, *MPI für Kernphysik, Heidelberg*
- 15:40 Coffee break
- 16:10 **Laser acceleration experiment at IZEST and an acceleration mechanism of EECR**
Toshiki Tajima, *LMU Munich (VIDEO)*
- 16:35 **Galactic magnetic fields**
Andrew Fletcher, *Newcastle University*
- 17:00 **Tracking of EECR data in the magnetic field**
Maxim Pshirkov, *Moscow State University*

Poster Session 19:00-20:30

Tuesday, September 4th

Room S3

Lambda hypernuclear spectroscopy at JLab Hall-C

Toshiyuki Gogami, *Tohoku University*

Validating the extended relativistic mean field models with recent observational constrains of neutron star

Neha Gupta, *IIT Roorkee*

JEM-EUSO's angular reconstruction within the EUSO simulation and analysis framework

Alejandro Guzman, *Universität Tübingen*

The JEM-EUSO mission

Fumiyoshi Kajino, *Konan University*

Pairing interaction, tensor correlation, and deformation in Ne isotopes and Ne hypernuclei

Ang Li, *RIKEN Institute, Wako, Saitama*

Development of the nuclear reaction data file for astrophysics (NRDF/A)

Ayano Makinaga, *University of Hokkaido*

Nuclear response for the Skyrme effective interaction with zero-range tensor terms

Alessandro Pastore, *IPNL, Lyon*

MAGIC observations of very high energy gamma-rays from distant blazars

Koji Saito, *University of Tokyo*

Energies and transition probabilities from the full solution of nuclear quadrupole-octupole model

Michel Strecker, *Universität Gießen*

Development of microwave observation system from extensive air showers to detect ultra high energy cosmic rays

Tokonatsu Yamamoto, *Konan University*

Performance tests of the frontend ASIC for the JEM-EUSO telescope

Kenji Yoshida, *Konan University*

Plenary HYP **Wednesday, September 5th**
Room K1

- 9:00 **Spectroscopic study of hypernuclei**
Satoshi N. Nakamura, *Tohoku University*
- 9:45 **Few-body aspects of hypernuclear physics**
Emiko Hiyama, *RIKEN Institute, Wako, Saitama*
- 10:20 Coffee break
- 10:50 **Lambda particle as a probe of nuclear structure**
Takeshi Koike, *Tohoku University*
- 11:25 **Neutron star problems proposed by hyperons**
Tatsuyuki Takatsuka, *Iwate University*

Plenary NPP **Thursday, September 6th**
Room K1

- 9:00 **Dipole strength on the tail of the giant dipole resonance**
Ronald Schwengner, *Helmholtz-Zentrum Dresden-Rossendorf*
- 9:30 **Nuclear resonance fluorescence and pygmy dipole**
Deniz Savran, *Extreme Matter Institute EMMI / GSI*
- 10:00 **Photoneutron cross section measurements for nuclear physics and astrophysics**
Hiroaki Utsunomiya, *Konan University*
- 10:30 Coffee break
- 11:00 **Towards a competitive relativistic mean field (RMF) mass formula**
Daniel Peña Arteaga, *IPN, Orsay*
- 11:30 **Extreme light infrastructure - nuclear physics (ELI-NP)**
Victor Zamfir, *IFIN Bucharest*
- 12:00 **Laser plasma accelerators**
Victor Malka, *LOA/ENSTA/CNRS/Ecole Polytechnique*

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| Parallel | PEN | Thursday, September 6th Room K1 |
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- 14:00 **Recent shell model results for exotic nuclei**
Yutaka Utsuno, *JAEA, Tokai*
- 14:30 **Recent results of decay spectroscopy at RIBF and future perspectives with EURICA**
Hiroshi Watanabe, *RIKEN Institute, Wako, Saitama*
- 15:00 **Low-energy fission studied with relativistic exotic beams**
Aleksandra Kelic-Heil, *GSI, Darmstadt*
- 15:30 Coffee break
- 16:00 **Loosely bound deformed nuclei near the neutron drip line**
Masayasu Ishihara, *RIKEN Institute, Wako, Saitama*
- 16:30 **Interaction cross section measurements of light neutron-rich nuclei**
Maya Takechi, *GSI, Darmstadt*
- 17:00 **Structure and reactions of light nuclei**
Thomas Neff, *GSI, Darmstadt*

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| Parallel | NPP | Thursday, September 6th Room K2 |
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- 14:00 **Gamma-ray cascade transitions from resonant neutron capture in ^{111}Cd and ^{113}Cd**
Gencho Rusev, *LANL, Los Alamos*
- 14:30 **Gamma ray strength functions and neutron reaction cross sections**
Hilde-Therese Nyhus, *University of Oslo*
- 15:00 **Radiative neutron capture as a source of information on gamma decay of nuclei**
Milan Krticka, *Charles University, Prague*
- 15:30 Coffee break
- 16:00 **Probing the character of the pygmy dipole resonance**
Vera Derya, *Universität Köln*
- 16:30 **Pygmy dipole resonance in open-shell and closed-shell nuclei and a new approach to its decay pattern**
Christopher Romig, *TU Darmstadt*
- 17:00 **Fine structure of the pygmy resonances**
Nadia Tsoneva, *Universität Gießen*

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| Parallel | HYP | Thursday, September 6th Room K3 |
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- 14:00 **The HypHI project at GSI: recent results of the study of hypernuclei in the reaction ${}^6\text{Li}+{}^{12}\text{C}$ at 2 AGeV**
Christophe Rappold, *GSI, Darmstadt*
- 14:30 **First evidence for ${}^6_\Lambda\text{H}$**
H. Elena Botta, *Univ. Torino*
- 15:00 **Properties of strangeness nuclei in the Skyrme Hartree-Fock method**
Xian-Rong Zhou, *Xiamen University*
- 15:30 Coffee break
- 16:00 **Strangeness $S=-2$ baryon-baryon systems from lattice QCD**
Kenji Sasaki, *University of Tsukuba*
- 16:30 **Hypernuclear research at MAMI, GSI and FAIR**
Patrick Achenbach, *Universität Mainz*
- 17:00 **Strangeness nuclear physics in J-PARC: initial results and recovery from the earthquake**
Kiyoshi Tanida, *Seoul National University*

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| Plenary | PEN | Friday, September 7th Room K1 |
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- 9:00 **Spin isospin nuclear responses studied with RI-beams**
Tomohiro Uesaka, *RIKEN Institute, Wako, Saitama*
- 9:30 **Mass measurements of short-lived nuclides using isochronous mass spectrometry at CSRe**
Xiaolin Tu, *IMP, Lanzhou*
- 10:00 **Studies of two-proton radioactivity**
Ivan Mukha, *GSI, Darmstadt*
- 10:30 Coffee break
- 11:00 **In-beam gamma-ray spectroscopy of neutron-rich silicon isotopes**
Satoshi Takeuchi, *RIKEN Institute, Wako, Saitama*
- 11:30 **Structure of light dripline nuclei: ${}^6\text{Be}$ and ${}^{6-10}\text{He}$ isotopes**
Andrey Fomichev, *JINR, Dubna*
- 12:00 **Deeply-bound nucleon removal and transfer from exotic nuclei**
Alexandre Obertelli, *CEA, Gif-sur-Yvette/Saclay*