

Focused workshop on rare isotope physics

Thursday, November 24, 2022 - Saturday, November 26, 2022

Yeosu Expo Convention Center

Scientific Programme

Nov. 24 (Thurs.)

13:00 – 14:00 Registration

14:00 - 15:00 Byungsik Hong (Korea U.): Plan to study the nuclear equation of state and symmetry energy at RAON

15:00 – 16:00 Ik Jae Shin (IBS): Proton induced fission process with a Langevin approach

16:00 – 16:30 break

Chair: Jun Young Moon (IBS)

16:30 – 16:50 Yong-Beom Choi (UNIST): Alpha decay half-lives in the ground states of $72 \leq Z \leq 80$ even-even isotopes

16:50 – 17:10 Jungwoo Lee (Korea U.): Isoscaling behavior from Sn+Sn collisions at 270 MeV/u

17:10 – 17:30 Byul Moon (IBS): The IDATEN project: new perspective on nuclear structure of exotic nuclei

17:30 – 17:50 Kyungil Kim (IBS): Role of the light mass nuclear reactions in the r-process nucleosynthesis

18:00 – 20:00 **focused workshop dinner**

Nov. 25 (Fri.)

Chair: Myeong-Hwan Mun (SSU)

09:30 – 10:30 Sunghoon (Tony) Ahn (IBS): Key nuclear reaction studies impacting on various nucleosynthesis

10:30 – 10:50 break

Chair: Chang-Hwan Lee (PNU)

10:50 – 11:50 Kyungyuk Chae (SKKU): Machine learning for nuclear physics

11:50 – 12:10 Eunseok Hwang (Soongsil U.): Numerical improvements on s-wave penetration for Gamow factor

Chair: Myung-Ki Cheoun (SSU)

14:00 – 15:00 Deuk Soon Ahn (IBS): Exploring the limits of nuclear existence

15:00 – 16:00 Yunghee Kim (IBS): Fission studies at low energy facilities and possible application at RAON

16:00 – 16:30 break

Chair: Sanghoon Lim (PNU)

16:30 – 17:30 Kyoungsu Heo (Soongsil U.): Extended optical model for breakup reactions in low-energy

17:30 – 17:50 Xesus PEREIRA-LOPEZ (IBS): Probing isospin-symmetry with fusion-evaporation reactions

17:50 – 18:10 Young-Min Kim (UNIST): Functional renormalization group method for nuclear matter and neutron stars

Nov. 26 (Sat.)

Chair: Kevin Insik Hahn (IBS)

10:00 – 11:00 Taeksu Shin (IBS): RAON Beam Plan for Early Phase Experiment

11:00 – 11:20 Jason Park (IBS): Investigating single-particle states in ^{111}Sn through $d(^{110}\text{Sn},p)$ reaction with ISS

11:20 – 11:40 Bui Minh Loc (IBS): Bound-to-continuum approach for resonant elastic scattering