CENuM-RULiC Joint Workshop on

Extreme Nuclear States and Reactions

Dates: October 31 – November 2, 2019

Venue: Science Culture Center, IBS, Daejeon, Korea

Program

Thursday, October 31

09:00-09:10 Seung-Woo Hong (Sungkyunkwan University) Welcoming address

Session 1 (Chair: Byungsik Hong)

09:10-09:50 Michael Smith (ORNL) Nuclear astrophysics measurements with radioactive beams

09:50-10:20 Insik Hahn (Ewha Womans University) Nuclear reactions with RI beams for X-ray burst

10:20-10:50 Jianjun He (Beijing Normal University) Nuclear astrophysics studies relevant to X-ray bursts

10:50-11:20 Break

Session 2 (Chair: Youngman Kim)

11:20-12:00 Feng-Shou Zhang (Beijing Normal University) Production of heavy neutron rich isotopes in radioactive beam induced multinucleon transfer reactions

12:00-12:30 Jun Su (Beijing Normal University) Beta-delayed decay study at RIBLL and BRIF

12:30-14:00 Lunch

Session 3 (Chair: Kyungyuk Chae)

14:00-14:30 Meng Wang (Institute of Modern Physics) Precision mass measurement of short-lived nuclides at CSR

14:30-15:00 Su Houng Lee (Yonsei University) Baryons in symmetric and asymmetric nuclear matter

15:00-15:30 Yingxun Zhang (China Institute of Atomic Energy) Symmetry energy extracted from transport models

15:30-16:00 Break

Session 4 (Chair: Kyungil Kim)

16:00-16:20 Minsik Kwag (Sungkyunkwan University) Study of astrophysical ^{18}F+p system through the ^{16}O(^{6}Li,t)^{19}Ne measurement

16:20-16:40 Hyunwoo Chae (Seoul National University) Study of unbound nuclei ^{33}Ne via 1p knock-out reaction

16:40-17:00 Seon Ho Nam (Korea University) Status and analysis plan for nuclear symmetry energy using Ni+Ni collisions in INDRA-FAZIA experiment

17:00-17:20 Jung Woo Lee (Korea University) Track reconstruction at SPiRIT

17:20-17:40 Jongwon Lee (Korea University) Status of the neutron detector array for LAMPS at RAON

Friday, November 1

Session 5 (Chair: Insik Hahn)

09:00-09:40 Hideyuki Sakai (RIKEN) Search for tetra- and tri-neutron resonance states

09:40-10:10 Myun Kwon (IBS) Overview of RISP

10:10-10:40 Chang-Bum Moon (Hosea University) A variety of nuclear shapes

10:40-11:10 Break

Session 6 (Chair: Jin Hee Yoon)

11:10-11:40 Kyungyuk Chae (Sungkyunkwan University) Measuring compound nucleus reaction using solenoid-based detector system

11:40-12:10 Kyungil Kim (IBS) Sensitivity of r-process nucleosynthesis to the light mass nuclear reactions

12:10-12:40 Li-Yong Zhang (Beijing Normal University) Direct measurement of the key ^{19}F(p,α)^{16}O reaction in AGB stars

12:40-14:00 Lunch

Session 7 (Chair: Yingxun Zhang)

14:00-14:30 Myungki Cheoun (Soongsil University) Isoscalar pair condensation and tensor force inside nuclei

14:30-15:00 Yu-Min Zhao (Shanghai Jiao Tong University) Nucleon-pair approximation of the nuclear shell model

15:00-15:30 Yoshiteru Satou (IBS) Nuclear structure from semi-inclusive nucleon knockout reactions

15:30-18:00 Technical tour to RAON site in Shindong

18:00-21:00 Banquet

Saturday, November 2

Session 8 (Chair: Young Kwan Kwon)

09:00-09:40 Nigel Orr (LPC-Caen) Direct reaction studies of light neutron-rich nuclei beyond the dripline

09:40-10:10 Ngoc Duy Nguyen (Sungkyunkwan University) An MR-TOF simulator for precise mass measurement

10:10-10:30 Jeonghyeok Park (Korea University) Overview of E14030 & 15190 at NSCL and simulation

10:30-11:00 Break

Session 9 (Chair: Dong-Ho Moon)

11:00-11:30 Chang Ho Hyun (Daegu University) Neutron drip line of Ca, Ni, Zr, Sn and Pb nuclei with KIDS EDF

11:30-12:00 Panagiota Papakonstantinou (IBS) Symmetry energy parameters and nuclear structure in the KIDS framework

12:00-13:30 Lunch

Session 10 (Chair: Minjung Kweon)

13:30-14:00 Seonho Choi (Seoul National University) Decay Spectroscopy of Mo Isotopes

14:00-14:30 Youngman Kim (IBS) Proton mass and RAON

14:30-15:00 Break

Session 11: Discussion

15:00-17:00 (Conveners) Seonho Choi and Kyungyuk Chae

Panel: Insik Hahn, Seung-Woo Hong, Nigel Orr, Michael Smith, Feng-Shou Zhang

17:00 Adjourn