

**Joint Symposium on Nuclear, Particle & Field, and Astro Physics
(SYNPA2017)
and
Heavy-Ion Meeting (HIM)**

November 17-18, 2017

Chonnam National University, Gwangju, Korea

▶ Web page

<https://indico.cern.ch/event/673207/>

▶ Venue

Cosmos Hall, College of Engineering Building #4

(전남대 공대 4호관 코스모스홀)

Chonnam National University, Gwangju, South Korea

▶ Hosted by

- Division of Astrophysics, KPS
- Division of Nuclear Physics, KPS
- Division of Particles and Field, KPS
- Korean Association of High-Energy Physics

▶ Supported by

- Asia-Pacific Center for Theoretical Physics (APCTP)

▶ Organizing Committee

- Byungsik Hong (Korea University, Chair of the Division of Nuclear Physics)
- Gungwon Kang (KISTI, Chair of the Division of Astrophysics)
- Youngjoon Kwon (Yonsei University, Chair of the Division of Particles & Fields)
- Kang Seog Lee (Chonnam National University, Chair of Korean Association of High-Energy Physics)
- Dong Ho Moon (Chonnam National University)

Program

Friday, Nov. 17

09:00–09:10 Kang Seog Lee (Chonnam Nat. Univ.) Welcoming address

Session 1: Gravitational wave (Chair: Gungwon Kang)

09:10–09:50 Gravitational waves with LIGO/Virgo detectors and future detectors in mid-frequencies, Hyung Mok Lee (Seoul Nat. Univ.) hmlee@snu.ac.kr

09:50–10:30 Inflation cosmology and detection of the primordial gravitational wave (in English), Eunil Won (Korea Univ.) eunilwon@korea.ac.kr

10:30–10:50 Break

Session 2: QCD (Chair: Dong Ho Moon)

10:50–11:30 QCD phenomenology using effective field theory, Jungil Lee (Korea Univ.) jungil@korea.ac.kr

11:30–12:10 Exotics and heavy ion collision, Su Hounng Lee (Yonsei Univ.) suhounng@gmail.com

12:10–13:30 Lunch

Session 3: Exotic hadrons (Chair: Jae Sik Lee)

13:30–14:10 Issues in hadron spectroscopy: Puzzling near-threshold anomalies (in English), Stephen Olsen (CUP/IBS) solsensnu@gmail.com

14:10–14:50 Omega_c as possible exotic heavy baryons, Hyun-Chul Kim (Inha Univ.) hchkim@inha.ac.kr

14:50–15:30 Skyrmion and exotic baryons, Hyunkyu Lee (Hanyang Univ.) hyunkyu@hanyang.ac.kr

15:30–16:00 Break

Session 4: Rare isotope physics (Chair: Byungsik Hong)

16:00–16:40 Rare isotope science project in Korea, Sunchan Jeong (RISP/IBS) scjeong@ibs.re.kr

16:40–17:20 Prospect for nuclear astrophysics using radioactive ion beams, Kevin Insik Hahn (Ewha Womans Univ.) ishahn@ewha.ac.kr

17:20–18:00 Exotic particles and nuclei and their implication in the BBN and stella evolution, Myung Ki Cheon (Soongsil Univ.) cheon@ssu.ac.kr

18:30–21:00 Dinner

Saturday, Nov. 18

Session 5: Deep learning and physics (Chair: Youngjoon Kwon)

09:00-09:40 Deep learning and gravitational-waves, Edwin J. Son (NIMS)

eddy@nims.re.kr

09:40-10:20 Deep learning in HEP (in English), Savannah Thais (Yale Univ.)

savannah.thais@yale.edu

10:20-10:50 Break

Session 6: Neutron star and compact objects (Chair: In Kwon Yoo)

10:50-11:30 Tidal deformability of neutron stars and gravitational waves,

Chang-Hwan Lee (Pusan Nat. Univ.) clee@pusan.ac.kr

11:30-12:10 Nuclear EOS: all that matters, Youngman Kim (RISP/IBS)

ykim@ibs.re.kr

12:10-14:00 Lunch

Session 7: Astrophysical particles (Chair: Kyung Kwang Joo)

14:00-14:40 Particles from Universe, Ki Young Choi (Sungkyunkwan Univ.)

ckysky@skku.edu

14:40-15:20 Observation of cosmic rays, Il Hung Park (Sungkyunkwan Univ.)

ilpark@skku.edu

15:20-15:50 Break

Session 8: Dark matter, dark energy and inflation (Chair: Sun Kee Kim)

15:50-16:30 Dark pion DM, dark Higgs and Higgs inflation, Pyungwon Ko (KIAS)

pko@kias.re.kr

16:30-17:10 Ultralight scalar dark matter and challenges for lambda CDM model,

Jae-Weon Lee (Jungwon Univ.) scikid@gmail.com

17:10-17:50 Closing remark, Sun Kee Kim (Seoul Nat. Univ.) skkim@snu.ac.kr

18:00-20:00 Dinner & Adjourn