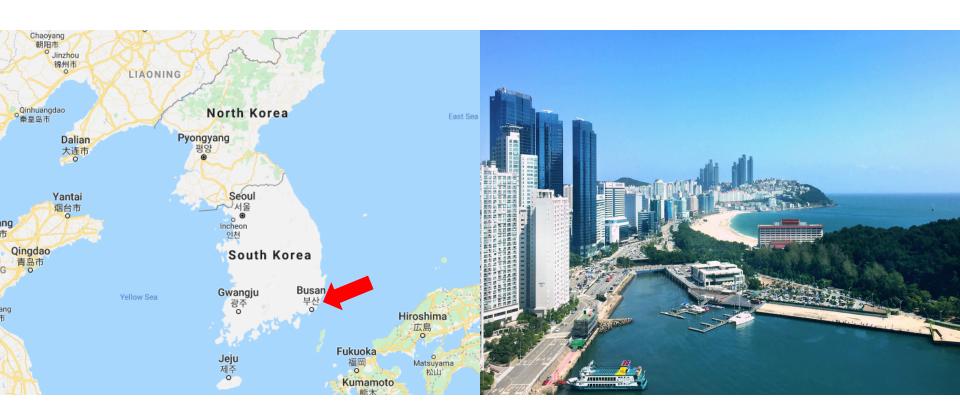
Proposal for Pusan National University to join sPHENIX

Sanghoon Lim
Pusan National University



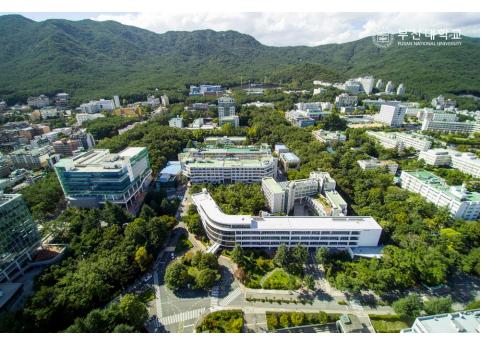
Pusan National University

- Locate at southern part of Korea
 - Second largest city in Korea
 - Next Strangeness in Quark Matter (SQM) in 2021 (May 17-22)





Pusan National University



- Founded in 1946
- Supported by Korean government
- ~28,000 students
 (~8,000 graduate students)
 ~2,000 academic staff
- Web page
 - http://www.pusan.ac.kr/eng/Main.do
- Physics department
 - ~20 faculty members
 - ~250 undergrad students
 - − ~30 grad students



High energy nuclear physics lab





- One faculty working on heavy-ion
 - In-Kwon Yoo
- Mainly focusing on ALICE
 - Had participated in STAR (not anymore)
 - Facility to produce outer barrel stave for the ALICE ITS upgrade
 - Group members
 - Actively working on the ALICE ITS upgrade
 - 3 graduate students
 - undergraduate students



Contribution to sPHENIX

- Past and present
 - Have been participating in sPHENIX
 - Yonsei University (PHENIX)
 - Los Alamos National Lab (PHENIX/sPHENIX)
 - University of Colorado Boulder (PHENIX/sPHENIX/ATLAS)



- Inner detector software
 - Vertexing
 - Performance study in high pileup condition
 - MVTX test beam analysis
- Study of b-jet measurement in sPHENIX
 - Secondary vertex analysis
 - Performance evaluation



Contribution to sPHENIX

Future

- Research interest
 - Interested in heavy-flavor physics (b-jet analysis)
 - Inner detector software (vertexing/tracking)
 - Possibility to more involve in the MVTX project based on ALICE ITS experience

- Participant

- Start with myself for the time being
 I grad student for ALICE starting from March
- Will recruit more students for sPHENIX

Fund

- ALICE activity will be mostly supported by Korean government
- Have submitted a research proposal for PHENIX/sPHENIX (under review)
- Small research fund from the university (can support one student)

