The first circular

Workshop on

“HIAF High-Energy Beam Line Physics

 and Nuclear Astrophysics”

The international workshop on "HIAF High-Energy Beam Line Physics and Nuclear Astrophysics" will be held from December 13-15, 2018 at Beihang university campus.

The HIAF project promoted by IMP/Lanzhou is approved and the construction starts this year in Huizhou（惠州）. The synchrotron of the facility is planned to have the magnetic rigidity up to 34 Tm and accelerate high-intensity beams. A secondary beam separator up to 25 Tm magnetic rigidity is also planned. Those high-energy and high-intensity beams stable and unstable ions open new possibilities of studies in physics.

GW170817/SSS17a was an event of the century that has opened a new window to the frontier science of multi-messenger astronomy and nuclear astrophysics. Having this opportunity we would like to discuss how to promote interdisciplinary collaboration between HIAF science and nuclear astrophysics with the emphasis on element genesis in the Universe.

The workshop program includes both experimental and theoretical discussions on

1. Use of the primary beams up to 9 GeV proton and 8.4*A* GeV heavy-ions (*A/Z*=2).
2. Use of high-energy radioactive beams up to 25 Tm (2.9*A* GeV for A/Z=2, 1.7A GeV for *A/Z*=3)
3. Heavy-ion collisions
4. Nuclear physics
5. Cosmo-nuclear physics
6. Element synthesis in neutron star mergers and supernovae
7. Other related topics

Another workshop on "Proton and Neutron Densities and Radii in Nuclei and Related Topics" will be held in the following week (Dec. 17-19). In this workshop astrophysical aspect related to the Equation of States (EOS) of asymmetric matter and high-density matter will also be discussed. Two workshops are somehow combined and continuation of discussion is expected. Please refer to the other circular for more information.

If you are interested in the workshop, please send an e-mail including information listed below to one of our scientific secretaries at your earliest convenience.

1. Your name and Institutions
2. Title of your talk and expected length of the talk.
3. Your e-mail address
4. Any other request, suggestions, and comments.
5. If you need visa to come to China please contact one of our secretary S. Y. Fu.

**==== Conference information**

1. Place: Conference center at Beihang University. No. 37 Xueyuan Road, Haidian District, Beijing
2. Date: December 13 - 15, 2018 (Session starts in the morning of Dec. 13)
3. Invited speakers include;

T. Aumann C. A. Bertulani S. Chiba

M. K. Cheoun R. Diehl M. A. Famiano

H. Geissel E. Hiyama W. Horiuchi

J.N. Hu K. Itahashi M. Paolo

E. Pian T. Saito C. Scheidenberger

J.R. Shi S. Shibazaki Z. Y. Sun

R. Surman Y. Suzuki H. Toki

M. R, Wu Z.G. Xiao N. Xu

R. X. Xu X. F. Yang J. Zenihiro

Y. H. Zhang

1. Organized by: International Research Center for Nuclei and Particles in Cosmos, Beihang University

 International Research Center for Big-Bang Cosmology and Element Genesis, Beihang University

 Institute of Modern Physics, Lanzhou

Web page for Beihang university is available at ev.buaa.edu.cn and www.buaa.edu.cn.

Web page for IMP, Lanzhou is available at English.imp.cas.cn and www.impcas.ac.cn.

1. Local Organizer:

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