The first circular

Workshop on

“Proton and Neutron Densities and Radii in Nuclei

and Related Topics”

The international workshop on "Proton and Neutron Densities and Radii in Nuclei and Related Topics" will be held from December 17-19, 2018 at Beihang university campus.

Determinations of nuclear radii and nuclear density distributions are one of the most important research fields of nuclear physics. Not only providing stringent test of nuclear models, nuclear radii also provide important constraints on the Equation of States (EOS) of nuclear matter.

Measurements of interaction, reaction, and charge changing cross sections has been developed to study radii of nucleon, proton, and neutron distributions. New methods such neutron removals cross-section measurements are also recently proposed. Supported by those measurements, neutron (or proton) skin thickness of exotic nuclei is progressing and those for heavier nuclei are one of the important goals for studies of EOS. However, the method of determination of radii and neutron skin as well as the connection of the skin to the EOS is not yet firmly established sufficiently.

This workshop is not a conference just to hear results of researches but a workshop to realize the present problems and discuss possible future improvements. Therefore, we would like to ask you to bring key information to discuss and improve the knowledge on nuclear radii and EOS studies both from experimental and theoretical point of views.

The conference program includes both experimental and theoretical discussions on

1. The importance of the study of nuclear radii for the future.
2. The experimental method and the precision of those measurements.
3. What is the precision of determination of radii (densities) from experiments?
4. How well can we determine the EOS of symmetric and asymmetric nuclear matter?
5. Limits on the precision of the radii measurements.
6. Other topics related to nuclear density and radius

There will be another workshop in the preceding week (Dec. 13-15) on " HIAF High-Energy Beam Lines Physics and Nuclear Astrophysics". 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 17 - 19, 2018 (Session starts in the morning of Dec. 17)
3. Invited speakers include;

T. Aumann C. A. Bertulani S. Chiba

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

H. Geissel M. Fukuda W. Horiuchi

R. Kanungo J. Meng E. Pian

J.R. Shi S. Shibazaki R. Surman

Y. Suzuki M. R, Wu Z.G. Xiao

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

International Research Center for Big-Bang Cosmology and Element Genesis

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

1. Local Organizer:

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