Workshop on Nuclear Resonant Scattering

-- Towards building a dedicated NRS beamline in China

Place: Institute of High Energy Physics,

Chinese Academy of Sciences,

Beijing, China

Date: January 19-21, 2017

A dedicated nuclear resonant scattering (NRS) beamline is being considered for the upcoming High Energy Photon Source (HEPS), which is expected to be built in Beijing, China in two years. We are going to hold a workshop on NRS (1st nuclear resonant scattering workshop in China) at the Institute of High Energy Physics, Beijing on January 20-22, 2017, and prepare a report that will become part of the "Scientific Case for HEPS". In this workshop, the following topics will be covered: 1) Important scientific problems that can be addressed by NRS techniques in various fields like geophysics, biochemistry, and materials science. 2) Beamlines and instrumentation development for NRS: current status and future development at low emittance storage ring (ESRF-U, APS-U, SPring8-U, and PETRA-IV); 3) Advice to NRS beamline team at HEPS in terms of beam requirements and sample environments. 4) Recent research results of prominent Chinese groups on high pressure science, superconductors, magnetism, biochemistry and catalyst that is using or will use the nuclear resonant scattering techniques (forward scattering and inelastic scattering). The main purpose of the workshop is to write up a report to support the construction of the NRS beamline at HEPS.

Invited speakers (* unconfirmed speakers):

| Name | Affiliation |
|-------------------------|---------------------------------------|
| Ralf Röhlsberger | Deutsches Elektronen-Synchrotron DESY |
| Yoshitaka Yoda | SPring-8 |
| Hans-Christian Wille | PETRAIII |
| Rudolf Rüffer | ESRF |
| *Alexandr Chumakov | ESRF |
| Esen Ercan Alp | APS, Argonne National Laboratory |
| *M. Seto | Kyoto University |
| Ho-kwang Mao | Carnegie Institution of Washington |
| Jiyong Zhao | APS, Argonne National Laboratory |
| Robert W. Scheidt, | University of Notre Dame |
| Michael Hu | APS, Argonne National Laboratory |
| Jianbo Wang/Desheng Xue | Lanzhou University |

| Zhaohua Cheng | IOP-CAS |
|--------------------|---------------------|
| Yuan-Hua Lin | Tsinghua University |
| Hua Pang/Zhiwei Li | Lanzhou University |
| Jianfeng Li | UCAS |
| Junhu Wang | DICP-CAS |
| Changqing Jin | IOP-CAS |

International Organizing Committee

Dr. Xu, Wei, Institute of High Energy Physics, Chinese Academy of Sciences

Prof. Dr. Li, Jian-feng, University of Chinese Academy of Sciences

Dr. Zhao Jiyong, Argonne National Laboratory

Dr. Alp, Ercan. Argonne National Laboratory

Dr. Hu, Michael, Argonne National Laboratory

Prof. Dr. Wang, Junhu, Dalian Institute of Chemical Physics, Chinese Academy of Sciences

Scientific Steering Committee

Prof. Stephen Cramer, University of California, Davis | UC Davis

Prof. Brent Fultz, California Institute of Technology

Prof. John Tse, University of Saskatchewan

Prof. Ho-Kwang (David) Mao, Carnegie Institution of Washington

Dr. Thomas Scott Toellner, Argonne National Laboratory

Prof. Jung-Fu "Afu" Lin, University of Texas at Austin

Prof. Tao Zhang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences

Prof. Xiaowei Zhang, Institute of High Energy Physics, Chinese Academy of Sciences

Prof. Yuhui Dong, Institute of High Energy Physics, Chinese Academy of Sciences

Prof. Tiandou Hu, Institute of High Energy Physics, Chinese Academy of Sciences

Local Organizing Committee

Wei Xu

Jianfeng Li

Meijuan Yu

Wei He

Haijiao Han

Zhen Hong

Zhiying Guo

Dongliang Chen

Contact information

Dr. Wei Xu, xuw@mail.ihep.ac.cn Phone: +86-10-88235156 Fax: +86-10-88235294

Dr. Meijuan Yu, <u>yumj@mail.ihep.ac.cn</u> Phone: +86-10-88236229 Fax: +86-10-88235294

Address

Lecture Hall, 19B, YuquanLu, Shijingshan District, Beijing 北京市石景山区玉泉路 19 号乙院高能物理研究所报告厅 www.ihep.ac.cn

Webpage of the workshop will be announced soon

本次研讨会得到中国科学院高能物理研究所高能同步辐射光源验证装置项目、中国高等科学技术中心、中国科学院真空物理重点实验室、中国科学院大学联合资助。