International Summer school on TeV Experimental Physics (iSTEP 2014)

Second Bulletin

The International Summer school on TeV Experimental Physics (iSTEP) will be held on **August 20 - 29, 2014** at Institute of High Energy Physics (IHEP), Chinese Academy of Sciences, Beijing, China. The inaugural 2014 summer school will introduce the physics programs at the Large Hadron Collider (LHC) and future high energy experiments. Lectures will cover theoretical background, physics motivation, experimental setup/methods, and the latest results on various particle physics topics, including the Standard Model, Higgs Physics, SUSY, and exotic New Physics searches. As a summer school aiming at experimentalists, hands-on tutorials will be provided. We also strongly encourage conversations and discussion between students and lecturers.

iSTEP is aimed to guide the first steps of the beginners at particle physics, such as senior undergraduate and young graduate students.

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Sponsoring Institutions:

National Natural Science Foundation of China Institute of High Energy Physics, Chinese Academy of Sciences Center for High Energy Physics, Peking University Center for High Energy Physics, Tsinghua University Shanghai Jiao Tong University School of Physics, Peking University University of Science and Technology of China Shandong University

Schedule:

Preliminary Lecture Schedule: 100 minutes lecture contains two 45 minutes sessions (including Q&A) and a 10 minutes break.

| [] | 9:00-10:40 | 10:50-12:30 | 14:00-15:40 | | 15:50-17:30 |
|---------------|---|-----------------------------|--|-----------------|--------------------------------|
| 8-20 | Opening Speech on | Standard Model - | Phenomenology (1) (QH. Cao) | | Standard Model |
| (Wed) | HEP Experimental | Electroweak | | | Precision |
| | Research at IHEP and | Theory(1) | | | Measurements |
| | China | | | | |
| | (HS. Chen) | (QH. Cao) | | | (Jianbei Liu) |
| 8-21 | Standard Model – | Accelerator | Collider Phenomenology (2) (QH. Cao) | | Higgs Physics |
| (Thu) | Electroweak Theory(2) | Physics | | | Experimental |
| | | | | | Results |
| | (QH. Cao) | (Jie Gao) | | | (Bruce Mellado) |
| 8-22 | Standard Model - | Detector & | Calorimeter (Tao Hu) MC Simulation and | | Tracking & Vertexing |
| (Fri) | QCD Theory(1) | Reconstruction | | | (1) |
| | | Overview (Manqi Ruan) | | | (Keisuke Fujii) |
| 8-23 | (ZG. Si) | · · · | | | |
| 8-23 (Sat) | Standard Model – | Tracking & Vertexing (2) | Event Generator | | Hadron Physics Experimental |
| (Sal) | QCD Theory(2) | | Event Gene | alui | Results |
| | (ZG. Si) | (Keisuke Fujii) | (Wolfgang Kilian) | | (Haibo Li) |
| 8-24 | Excursion | | | | |
| (Sun) | | | | | |
| 8-25 | Introduction to Beyond | Muon Detector | Statistics Methods in | | SUSY Searches at |
| (Mon) | Standard Model Theory | | Particle Physics (1) (Glen Cowan) | | Collider Experiments |
| | (1) | | | | |
| | (JM. Yang) | (CH. Jiang) | | | (Xuai Zhuang) |
| 8-26 | Introduction to Beyond | Trigger and Data | Statistics Methods in | | Top Quark Physics |
| (Tue) | Standard Model Theory | Acquisition System | (Glen Cowan) | | Experimental |
| | (2) | / <u> </u> | | | Results |
| | (JM. Yang) | (ZA. Liu) | | | (Yanjun Tu) |
| 8-27 | Higgs Physics | Statistics Methods | Non-SUSY New Physics Searches at Collider Experiments (Bruce Mellado) | | Future of TeV |
| (Wed) | phenomenology | in Particle Physics | | | Physics |
| | (LL. Yang) | (3) (Glen Cowan) | | | (TBA) |
| 8-28 | Analyses Hands-on Tuto | | | | |
| 0-20 (Thu) | Analyses Hands-on Tutorial (1) Analyses Hands-on Tutorial (2) | | | | |
| 8-29 | Q&A | Group Presentation and | | Prize & Summary | |
| (Fri) | Evaluation | | | | <i>,</i> |

Registration:

On-site registration is open on August 19 between 3pm to 5:30pm in front of the lecture room (see below). The registration will continue on the morning of August 20 (note that the first lecture starts at 9am). There is no fee for lecturers, all other participants should pay registration fee in cash (check conference website for fee structure).

Venue and Accommodation:

The lectures will be given at the lecture room C305 of Main Building (East Wing, a.k.a. Chemistry Building), IHEP campus [高能所主楼C305]. Participants will be accommodated at the IHEP Guest House (for students) [高能所专家招待所小二楼] and Jin Ding Hong Tai Hotel (for lecturers and overflow) [金鼎宏泰大酒店], which are both near the lecture site. Some detailed information including addresses and a map can be found here: <u>http://cfhep.ihep.ac.cn/accommodation.htm</u>.

Lecturers:

The lecture room is equipped with a PC and a projector. Apple users please provide a PDF version or check compatibility of your machine with the projector.

Conference Website:

http://indico.ihep.ac.cn/conferenceDisplay.py?ovw=True&confld=4127

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