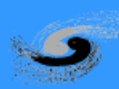


It is located in west Beijing

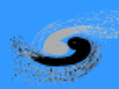
Introduction to IHEP

C.H. Wang

Oct. 8, 2010

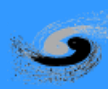


- **The Institute of High Energy Physics (IHEP) is the biggest and comprehensive fundamental research center in China.**
- **The major research fields of IHEP are particle physics, accelerator physics and technologies, radiation technologies and application, including the following research areas:**
 - **Particle physics experiments: BES, neutrino experiments, experiments at LHC and B-factories...**
 - **Particle astrophysics: cosmic ray, astrophysics experiments...**
 - **Accelerator physics and technology: high luminosity e+e- collider, high power proton accelerator, accelerator applications...**
 - **Synchrotron radiation: technology and application;**
 - **Nuclear analytical technique and application;**
 - **Free electron laser;**



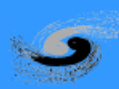
Continue

- The main research facilities at IHEP are:
 - Major Upgrade of Beijing Electron Positron Collider (BEPCII)
 - Upgrade of Beijing Spectrometer (BESIII)
 - Beijing Synchrotron Radiation Facility (BSRF)
 - Beijing Free Electron Laser (BFEL)
 - Particle Astrophysics Lab
 - Yangbajing International Cosmic Ray Observatory
 - Nuclear Analysis Lab
 - Intense Slow Positron Source



BEPCII: Major Upgrade of BEPC

- BEPCII is a double-ring collider within the existing BEPC tunnel.
- The designed luminosity of BEPCII is 10^{32} cm⁻²s⁻¹ at the beam energy of 1.89GeV, which is about two orders of magnitudes higher than the one of BEPC.
- The upgrade of Beijing Spectrometer, so called BESIII will adapt to high event rate and small bunch spacing(8ns), improve the measurement precision and particle identification, and extend the solid angle acceptance as well as accommodate Micro-beta quadrupoles.
- The physics goal of BEPCII is the precision measurements of charm physics and search for new particles and phenomena.
- The synchrotron radiation running will still use the outer ring with the current of 250mA at 2.5GeV.
- The beam commissioning started in October of 2006
- It achieved the design luminosity of 3.01×10^{32} cm⁻²s⁻¹ with 1.89GeV in May of 2009
- BEPCII runs 10 months per year
 - 5months for physics collision
 - 3months for dedicated synchrotron radiation
 - 2 months for machine starting and machine studies.



Non-accelerator Physics



- Yangbajing International Cosmic Ray



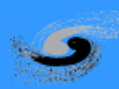
- The ARGO Experimental Hall
- (IHEP-INFN) Collaboration)



- AMS01 permanent magnet undergoing

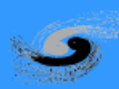


- The ground prototype of hard X ray of modulation telescope(HXMT)



CSNS-New Project

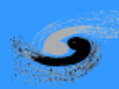
- Feb. 2001: idea of CSNS discussed
- Jun. 2005: project proposal approved in principle by central government
- Jan. 2006 -: CAS funded (30M CNY) for R&D 1
- Jul. 2007 -: Guangdong funded (40M CNY) for R&D 2
- Dec. 2007: project proposal review
- Sep. 2008: project proposal approved by central government
- Oct. 2009: project feasibility study review
- May 2011: expect to start project construction (ground breaking)



CSNS

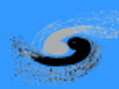
- The site of CSNS has been selected at Dongguan, Guangdong Province.
- CSNS is the first large scientific facility in southeastern part of China.
- It can balance the present uneven distribution of the facilities
- promote advanced researches in the economic developed zone of Guangdong-Hongkong.





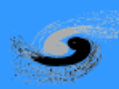
CSNS





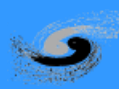
Web site: <http://www.ihep.cas.cn>

- IHEP has extensive cooperation with all high energy physics laboratories and participates in many important particle physics experiments in the world.
- IHEP is staffed with about 1000 people, including over 650 physicists and engineers.
- There are 300 graduate students and post-doctors.



Campus: beautiful

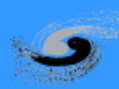




Guesthouse

- It is located inside the Campus
- It is quiet and tasteful
- About 40 rooms
- Next to Restaurant

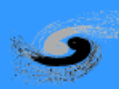




Nearby Hotel– Holiday Inn

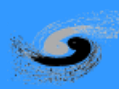


- 312 rooms
 - a refreshing dining selection at 3 restaurants
 - 7 multifunctional function rooms.
-
- Holiday Inn Chang An West Beijing provides comfortable accommodations to individual business travelers, for meetings and leisure travelers

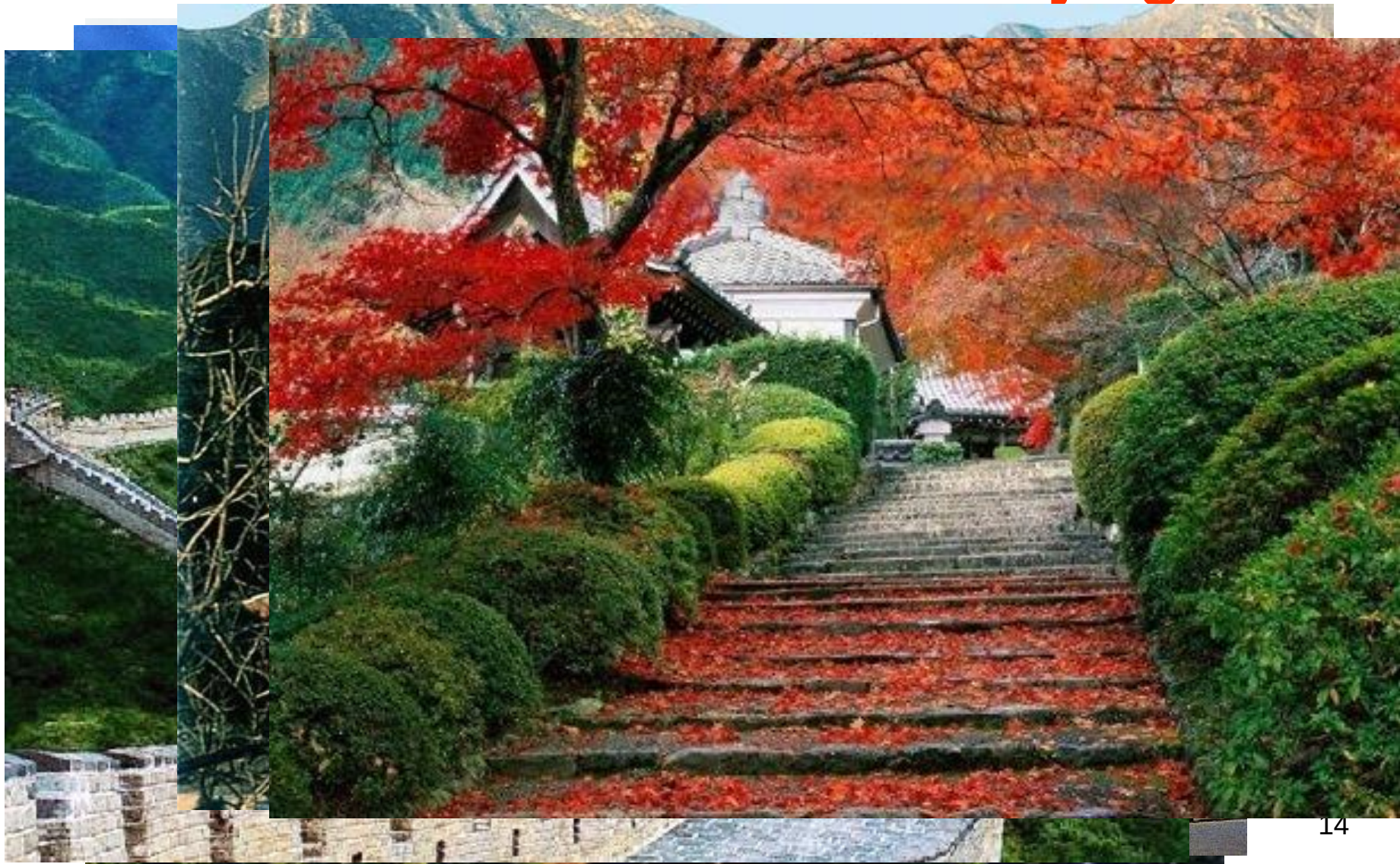


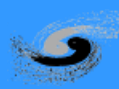
Introduction to Beijing

- **Beijing is the capital of PRC, which is the center of National politics, culture, transport, tourism and international exchanges.**
- **Located on north latitude $39^{\circ}56'$, east $116^{\circ}20'$.**
- **The whole city makes up of 11 zones and 7 counties.**
- **13M population**
- **The modern Beijing has experienced about ten generation of operation**
- **Beijing hosted successfully the 29th Olympic Games in 2008**
- **Many places of interest**



Places of Interest in Beijing





- **Beijing and IHEP is best selection to host the next PCaPAC**
- **Welcome to Beijing**
- **Seeing you in Beijing in PCaPAC2012**