Department of Physics and Faculty of Science

Jointly Organized

14-days China Immersion Program, 2012

Program Highlights: Chengdu, Jiuzhaigou Scenic Area, Huanglong, Mount Emei, Shanghai, Shanghai Post Expo

成都, 九寨沟, 黄龙, 峨眉山, 海螺沟, 上海, 2010上海世博会

Program Departure Dates:

Second week of May 2012 (likely to be 9th May - Subject to confirmation)

Eligibility: Level 1, 2, 3, 4 Physics Undergraduates
Students & Faculty of Science students taken
Physics Module

Registration closing date: 29th February 2012
(Please submit your registration form Dr Liu Ruchan)

Student's Contribution: $990 (70% of the travel costs subsidized by Faculty)

Program Availability: Only 30 students

Registration form:
or email to phylr@nus.edu.sg

Program Contact person (Please email completed form to)

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Trip Debrief Before Departure: TBA (May)
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You have a chance to interact with students from some top Chinese Universities, like Sichuan University and Donghua University, and to establish network and partnership for your future. Exclusive lectures on interesting topics have been organized for educational exchange.

This year CHIP program is special because we are visiting
- 2 UNESCO world heritage sites:
  Huanglong Scenic Area 黄龙 and
  Jiuzhaigou Scenic area 九寨沟, and
- 1 UNESCO World natural and cultural heritage Mount Emei 峨眉山

Jiuzhaigou is a China’s premier national park. It is said that if there should be wonderlands on the earth, Jiuzhaigou Valley must be one of them. There is no equal elsewhere that has sceneries and fables of dreamlike eloquence, or natural purities like a fairyland as Jiuzhaigou Valley. A must visit place in China. You will be swept off by the beauty of nature.

You will be visiting Hailuogou 海螺沟, a national level natural reserves, national glacier forest park, national AAAA class tour resort, and national geologic park. It is the only glacier and forest park in China.

You will be visiting Chengdu 成都, China’s 4th-most livable city by China Daily. She is one of the most important economic, transportation, and communication centers in Western China. According to the 2007 Public Appraisal for Best Chinese Cities for Investment, Chengdu was chosen as one of the top ten cities to invest in out of a total of 280 urban centers in China.

You will get to taste Chengdu’s spicy food. Local specialties include Grandma Chen's Tofu (Mapo doufu), Chengdu Hot pot, and Dan Dan Mien (literally meaning, "Noodles carried on a pole" (Dan Dan Noodles). All three dishes are spicy. Mapo Doufu and Dan Dan Mien contain Sichuan peppers to give them additional flavor. An article by the Los Angeles Times (2006)
called Chengdu "China's party city" for its carefree lifestyle. Chengdu outnumbers Shanghai in the number of tea houses and bars despite having less than half the population. The inhabitants have a reputation in China for having a laid-back attitude and for knowing how to enjoy life.

You will be visiting Shanghai, the largest city by population of the People's Republic of China (PRC) and the largest city proper in the world, with a total population of over 23 million as of 2010. It is a global city, with influence in commerce, culture, finance, media, fashion, technology and transport. It is a major financial center and the busiest container port in the world. Shanghai is a popular tourist destination renowned for its historical landmarks such as The Bund, City God Temple and Yuyuan Garden, as well as the extensive and growing Pudong skyline. It has been described as the "showpiece" of the booming economy of mainland China. In 2009, the Shanghai Stock Exchange ranked third among worldwide stock exchanges in terms of trading volume and sixth in terms of the total capitalization of listed companies, and the trading volume of six key commodities including rubber, copper and zinc on the Shanghai Futures Exchange all ranked first in the world.

You also have the opportunity to visit the Post Expo 2010 pavilions, Saudi Arabia Pavilion. She is one of the most popular pavilion during the 2010 Expo. Millions of people stood in line for 3 to 5 hours or more to view the exhibits and presentations.

You also will be visiting 1000 years old Zhouzhuang, "Venice of the East". It is one of the most famous water townships in China, noted for its profound cultural background, the well preserved ancient residential houses and the elegant watery views.

Do not miss a great opportunity to experience the vibrant New China, enjoy world renowned beautiful sceneries, understanding the culture of the people, and learning thousand years of Chinese history.

See you in China.
**PROGRAM ITINERARY:**

**Day 1:** Take flight to Chengdu - Capital of Sichuan province. 成都,四川

**Day 2:** Visit Sichuan University 四川大学 for exclusively organized lectures, local students interaction and networking.

**Day 3:** Travel to Huanglong Scenic Area - UNESCO world heritage list in 1992 黄龙风景区

The 'World Wonder' and 'Fairy Land on Earth' are names enjoyed by the Huanglong Scenic and Historic Interest Area, which is well known for its colorful lakes, snow clad mountains, valleys and virgin forest.

The Huanglong Scenic and Historic Interest Area is located in Songpan County, in the northwest part of Sichuan Province and encompasses the Huanglong and Muni Valley. Huanglong's major scenery is concentrated in the 3.6-kilometer (2.2 miles) long Huanglong Valley that includes snow-clad peaks and the easternmost glaciers in China.

Due to its layered calcium carbonated deposit patterns, the valley resembles a golden dragon winding its way through the virgin forest, stone mountains and glaciers. Along the valley are scattering numerous colorful ponds of different sizes and shapes, which are strewn with gold colored limestone deposit giving a shimmering golden hue to water, so in sunlight, a golden dragon seems to surge forth from the forest. Thus it was named 'Huanglong Valley' (Yellow Dragon Valley).

Huanglong Scenic and Historic Interest Area is famed for its outstanding travertine (calcium carbonate) formations. With the virgin forest as its backdrop, the travertine scenery holds colorful ponds, beaches, lakes, springs, waterfalls, caves, etc. The travertine formations scenery is No.1 in China.

**Day 4:** Jiuzhaigou Scenic area - UNESCO as a World Heritage Site in 1992 and a World Biosphere Reserve in 1997 九寨沟风景区

It is said that if there should be wonderlands on the earth, Jiuzhaigou Valley must be one of them. There is no equal elsewhere that has sceneries and fables of dreamlike eloquence, or natural purities like a fairyland as Jiuzhaigou Valley.
Jiuzhaigou Valley is located in Nanping County, 450 kilometers (about 280 miles) to the north of Chengdu City. Its name is due to the existence of nine stockaded villages of Tibetan origin, and it is always regarded as a holy mountain and watercourse by the Tibetan people. Jiuzhaigou Valley is a great masterpiece of nature having dreamlike scenery. It combines blue lakes, waterfalls, verdant forests, snow-covered mountains, and the folk customs of the Tibetan and Qiang peoples. Legend has it that long long ago the deity of mountain named Dago had a crush on the goddess Semo, and he gave a mirror that was made from wind and cloud to the goddess. However, the devil appeared and made trouble to Semo. Inadvertently, Semo broke the mirror into 108 pieces, which fell down to the earth and then turned to 108 colorful lakes. The lake is also called Haizi by local people.

In addition to the dreamlike sceneries, there are numerous flora and fauna in Jiuzhaigou Valley Scenic and Historic Interest Area. The natural forest covers an area of nearly 30,000 hectares (about 74,132 acres), including 2,576 higher plant species (24 species of national protected plants) and over 400 lower plant species (212 species of algae). The diversity of flora has provided a good environment for wild animals. There are 170 species of vertebrates, 141 species of birds and 17 species of rare animals. Among them the first rank has giant pandas, takins and golden monkeys and the second rank has lesser pandas, marmots, and blue sheep.

Day 5: Leshan 乐山游览

In ancient times Leshan was known as Jiazhou and was reputed as the place 'Where there is the most beautiful landscape in all Sichuan, there is Jiazhou'. It was famous for its abundance of the Chinese flowering crab-apple and long ago was given the title of 'Haitang (crab-apple) Xiangguo (fragrant city)'. Nowadays Leshan is particularly well known as a city of National Key Tourist
Attractions due to its natural landscape and wealth of cultural relics.

**Day 6: Mount Emei** – one of the Four Sacred Mountains of Buddhism – UNESCO World natural and cultural heritage 1996

Mt. Emei is towering, beautiful, old and mysterious. Mt. Emei is like a huge green screen standing in the southwest of the Chengdu Plain. Looking its winding and beautiful figure, you will find that it resembles very much an eyebrow of a girl. It is the highest one among all the famous sight-seeing mountains in China. Its main peak, the Golden Summit, is 3079.3 meters (10,103 feet) above the sea level, seemingly reaching the sky. Standing on the top of it, you can enjoy the snowy mountains in the west and the vast plain in the east. In addition in Golden Summit there are four spectacles: clouds sea, sunrise, Buddha rays and saint lamps.

Mt. Emei is a wondrous world. The trees are verdant almost all the year round; the waterfalls are splendid; the whole scenery is beautiful and quiet. The landscape varies according to the seasons, the height of mountain and the climate. The poet Tan Zhongyue living in the Qing Dynasty (1644-1911) once concluded the beautiful landscape in Emei Mountain into ten scenic sights. Today more and more new scenery has been discovered and given beautiful names such as Listen to the Spring beside the Tiger Brook, Plank Road above Longjiang River and Flying Waterfall Hanging over Dragon Gate. Go there and use your imagination, maybe you will discover a new sight by yourself.

Mt. Emei has a long history. According to the archaeological material, people in remote ancient times have lived in this place. As early as 5,000 years ago, the Emperor Xuanyuan paid two visits to the mountain to learn Tao thoughts. 1,900 years ago, a practitioner built the first monastery in the mountain, thus marked the Emei the birthplace of Buddhism in Yangtze Valley. Today the Buddhist culture has become the main body of Emei Culture.
The Buddhist architecture, music, grottos and paintings in the mountain all reflect rich religious flavor and culture.

**Day7 & Day 8: Hailuogou 海螺沟**

Hailuogou is one of the core scenic spots in Gongga Mountain scenic area. As a national-level nature reserve, it is the only glacier and forest park in China. At the same time, it is a state AAAA-class tourist area and a national geological park. Hailuogou is the scenic area of lowest elevation in eastern Asia, which is also closest to a big city. It has an ecological integrity of ancient forests. Moreover, boiling, hot, warm and cold springs are one important part of this integrated tourist scenic spot.

Hailuogou glacier has such active movement that different forms of crystal such as arc arches, ice caves, ice ladders, ice doors, glacial lakes and ice peaks come into being.

**Day 9: Travel by flight from Chengdu to Shanghai**

**Day 10 & 11: Shanghai 上海**

Shanghai ranks no. 2 in the top 20 China destinations for overseas tourists in 2011. Shanghai is the largest city in China, and one of the largest metropolitan areas in the world, with over 20 million people. Located on China's central eastern coast just at the mouth of the Yangtze River, the city is administered as a municipality of the People's Republic of China with province-level status.

Originally a fishing and textiles town, Shanghai grew to importance in the 19th century due to its favorable port location and as one of the cities opened to foreign trade by the 1842 Treaty of Nanking. The city flourished as a center of commerce between east and west, and became a multinational hub of finance and business by the 1930s. After 1990, the economic reforms introduced by Deng Xiaoping resulted in intense re-development and financing in Shanghai, and in 2005 Shanghai became the world's largest cargo port. Shanghai held the World Expo 2010, the largest event in China since the 2008 Olympics.
The city is a tourist destination renowned for its historical landmarks such as the Bund and City God Temple, its modern and ever-expanding Pudong skyline including the Oriental Pearl Tower, and its new reputation as a cosmopolitan center of culture and design. Today, Shanghai is the largest center of commerce and finance in mainland China, and has been described as the "showpiece" of the world's fastest-growing major economy.

Visit Post World Expo Saudi Arabia Pavilion and Shanghai city tour where you visit Shanghai World Financial Center International, City God Temple, Shanghai Museum, Shanghai Urban Planning Exhibition Hall, Nanjing Road and Century Bund.

Day 12: Donghua University 东华大学
Visit Donghua University for exclusively organized lectures, local students' interaction and networking.

Day 13: Zhouzhuang 周庄
Chinese people say that unless you visit the Great Wall then you haven't been to China. For any visit south of the Yangtze River; one place not to be missed is the town of zhouzhuang. Zhouzhuang is one of China's ancient water towns, where waterways thread their way through the flagstone streets and alleys. It is one of the most famous water townships in China, noted for its profound cultural background, the well preserved ancient residential houses and the elegant watery views. It has been called the "Venice of the East". It is said that people have lived in zhouzhuang 1000 years ago.

Day 14: Depart Shanghai for home with beautiful experiences, greater understanding of Chinese culture, economy, history and people, special memories and photos.

(Itinerary subject to change without prior notice)
**BRIEF INTRODUCTION OF SICHUAN UNIVERSITY** 四川大学

**Sichuan University** is one of the oldest national universities in China. It is ranked No. 8 among the Chinese universities according to the 2010 Academic Ranking of World Universities.

Sichuan University has two national key labs, six national engineering centers, five ministerial (MOE) key labs, 35 provincial key labs, 10 ministerial and provincial centers, four key research bases for humanities and social sciences, and four clinical research bases at the national level. The university has invested significantly in research, teaching and medical equipment, with a total value of about 530 million RMB.

SCU has undertaken and completed a considerable number of national, ministerial and regional research projects, and has made many achievements that are rated first class in China and bear significant international influence. The university publishes more than 4,000 research papers annually.

In 2002, the university’s state and central government funding ranked fifth among Chinese universities; it was ranked seventh for the number of publications and eleventh for publications included in SCI. The citations ranked fifteenth among Chinese universities. The number of publications in science, engineering and medicine ranked sixth, and the citations ranked seventh among Chinese universities. In 2002, the university applied for 121 patents, 102 out of which were invention-oriented, making it number eighth among peer schools.

**BRIEF INTRODUCTION OF DONGHUA UNIVERSITY** 东华大学

**Donghua University** is a public university in Shanghai, China administered by Chinese Ministry of Education and Shanghai municipality.

Donghua University actively engages herself in scientific research. It combines education with research and industry, and serves the nation’s and Shanghai’s economic construction as well as social development. Research projects have won the National Award for Advancement in Science and Technology, the National Award for invention, and provincial as well as ministry-level awards for advancement in science and technology.

For three successive years, various research projects, such as "Development of Protective Materials for the Surface of Space Suits", have been awarded the annual Ten Major Science Achievements of All Universities in China. Research achievements have been applied in many fields such as textile, new materials, aviation and spaceflight, agriculture, architecture, information, environmental protection, medical and health care.

In the past few years, students of Donghua have won awards and prizes in such national and international competitions including the International Collegiate Programming Contest, American Mathematical Contest in Modeling (MCM), Challenge Cup Chinese Collegiate Business Plan Competition, National Undergraduate Electronic Design Contest and CCTV Cup National Model Contest.