Driving forces of the Chinese HEIs

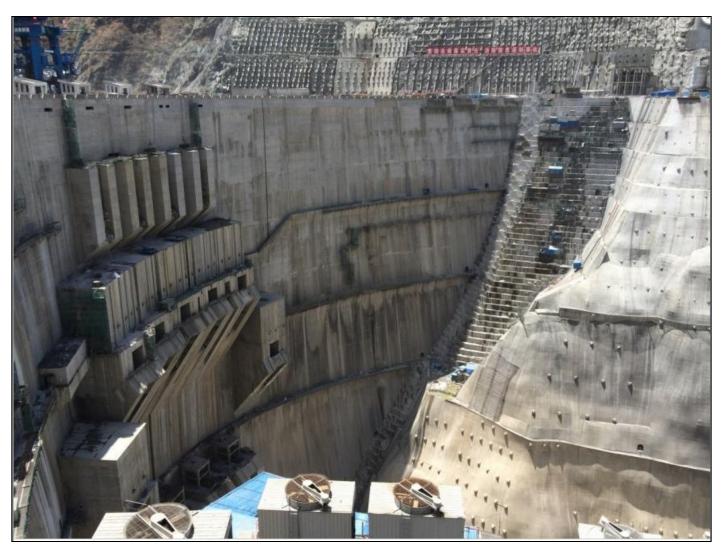
Liqiu Meng Bordeaux, 2014.06.16



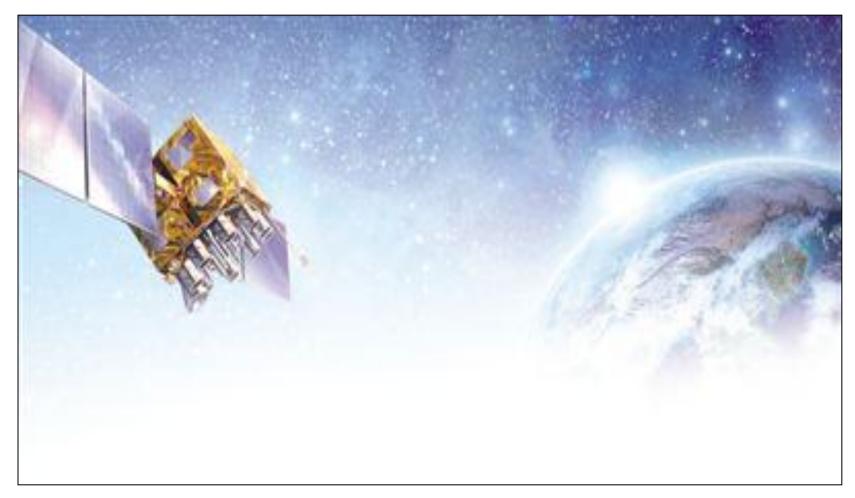
National policy

- Development is a crisp reason
 - infrastructure
 - high-end research programs
 - environmental challenges
- Chinese dream
 - expand the middle class for prosperity
 - prepare for a war in order to avoid the war
 - anti-corruption to maintain the harmony
- The daily feeling or attitude
 - dynamics
 - some mismatch between the body and soul
 - curiosity
 - individualism

Roll models of high-end research



SZ 2014.06.09 Chinese Jinping Underground Lab (2011.12 -), 2400m deep, for the detection of dark material



China Daily 2014.03.04

Compass Navigation System for positioning, timing, communication, started 2000, since 2012 operational for Asia-Pacific region with comparative precision to GPS, 15 satellites in operation

中国航天事业

发射无人和载人飞船,将 航天员安全地送入近地轨 道、进行对地观测和科学 实验,并使航天员安全返 回地面。随着我国第一名 航天员杨利伟于2003年10 月16日成功返回, 载人航 天实现历史性突破,第一 步任务已经完成 第一步

继续突破载人航天的基本 技术: 多人多天飞行、前 天员出舱在太空行走、 成飞船与空间舱的交会对 接。在这些基础上,发身 短期有人照料的空间实验 工程系统

课成永久性的空间试验 室、建成中国的空间工 程系统、航天员和科学 家可以往来于地球与空

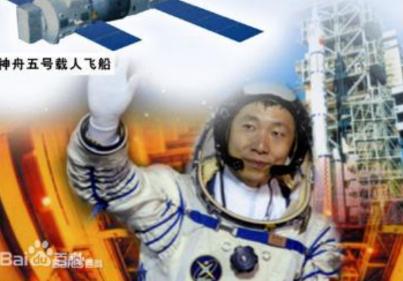




中国空间站假想图

中国未来空间 实验室假想图

神舟五号载人飞船



Manned spacecraft program (1992 -)

Shenzhou 5 (2003)

Shenzhou 6 (2005)

Shenzhou 7 (2008)

Shenzhou 8 (2012)

Shenzhou 9 (2013)



Tianhe 2 topped the ranking of super computing 2013, with 33,86 petaflops, nearly doubled so fast as the fastest supercomputer of US Titan with 17,59 petaflops at Oak Ridge National Lab

Internationalization policy

- Outgoings
- Returnings
- Incomings

1978-2013 Total number of outgoings: 3,058,600

- 47% returning
- 53% staying (2/3 in academic world)

2013

- CSC financed 710,700 incomings / outgoings (+15,83%)
- 73% of overseas Chinese students would return

Further numbers from 2013

- outgoings 413,900 (+3,58%)
 - 4% governmental finance
 - 3% finance by the home HEI
 - 93% self-finance
- coming back 353,500 (+29,53%)
 - 3.4% governmental finance
 - 2.8% finance by the home HEI
 - 93.8% self-finance
- incomings 356,499 (+8.58%)
 - from 200 countries & regions to over 746 HEI
 - 147,890 regular degree study, +10.77%
 - top 10 groups South Korea, USA, Thailand, Japan, Russia,
 Indonesia, Vietnam, India, Kazakhstan, Pakistan

♣ Types / tiers of universities (>2000)

- -7+2
- -985
- -211
- provincial U
- city U
- autonomous U
- branch campus
- joint campus
- **–** ...

University ecosystems

- campus development
- lab facilities
- IT management
- talent promotion programs (elite vs. mass)
- learning tradition: know what / know how / know why
- relation between universities (competition vs. collaboration)
- relation between supervisor and student
- relation to the labor market (demand vs. supply)

From a face in a crowd to one the crowd faces leader = power + wealth + academic title

4 Governing structure

- Dual governing system
- Non-academic staff
- Academic staff
 - deans
 - professors of n-levels (tenure-track)
 - lecturers & assistants
 - graduates
 - undergraduates
- HR management
- Communication strategy
- Rewarding system
- Knowledge transfer

4 Some concluding remarks

- China is the largest talent factory for the best universities in the world.
- The world-class research facilities at Chinese HEIs are attractive.
- Chinese researchers are nearly invisible in Europe.
- European HEIs are nearly invisible in China.
- Chinese learning is a must to get an insider view.
- Let's shape the global HE landscape together.