

# The China Crisis

**Xiaowei Liu**  
([x.liu@ynu.edu.cn](mailto:x.liu@ynu.edu.cn))

**South-Western Institute for Astronomy Research  
Yunnan University, Kunming, P. R. China**

**Under One Sky - the Centenary Symposium, Proceedings IAU Symposium No. 349,  
2019, C. Sterken, J. Hearnshaw & D. Valls-Gabaud, eds., pp.222-227  
Also available as arXiv:1812.04083v1 [physics.hist-ph]**



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编: 650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# Abstract

The so-called China crisis, well documented in *History of the IAU* by A. Blaauw and in *Under the Same Starry Sky History of the IAU* by C.-Q. Fu and S.-H. Ye refers to the withdrawal in 1961 of the People's Republic of China (PRC) from the Union. The crisis stemmed from the admission by IAU, amidst strong protest from PRC and some other member states, Republic of China (ROC) to the Union, creating the so-called “Two Chinas” or “One China, one Taiwan” problem. The crisis directly led to the absence of China mainland astronomers from the stage of international astronomical collaboration and exchange, and was only solved two decades later. The solution, accepted by all the parties involved, is that **China is to have two adhering organizations**, with China mainland astronomers represented by the Chinese Astronomical Society located in Nanjing (China Nanjing) and China Taiwan astronomers represented by the Academia Sinica located in Taipei (China Taipei). **The denominations, “China Nanjing” and “China Taipei” represent the IAU official resolution and should be used in all IAU events.**

The crisis was a painful lesson in the 100-year history of growth and development of the Union. Yet, with its eventual solution, the Union emerged stronger, upholding its spirit of promoting astronomical development through international collaboration of astronomers from all regions and countries, regardless of the political systems, religions, ethnics, genders or astronomical development levels. The resolution of the crisis, combined with the continuing improvement of relation across the Taiwan Strait, has **benefited astronomers on both sides of the Strait, stimulated and facilitated collaborations amongst them as well as with the international community at large.** Four decades after the crisis, Chinese astronomy research and education, on both sides of the Strait, are posed to make major contributions to the world astronomy development and to the whole humanity.



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

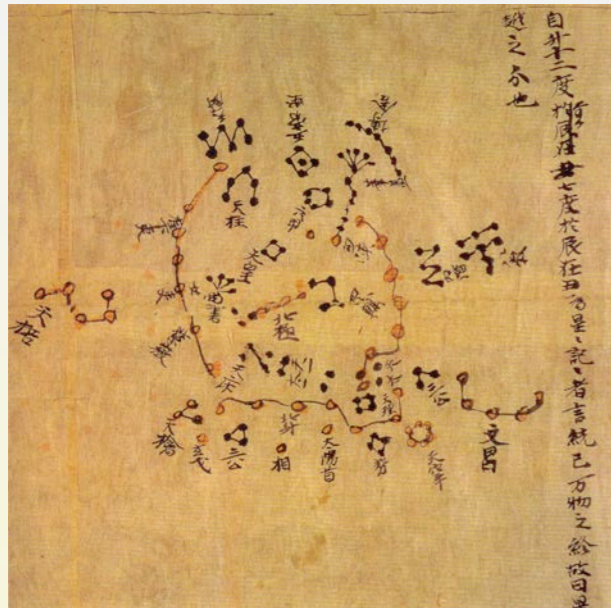
Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# Chinese astronomy and interaction with the West

China has a long and contiguous civilization of over 4000 years and a rich record of astronomical observations and studies.



Stellar atlas from Tang Dynasty (618-907). Mogao Caves, Dunhuang, Gansu, showing constellations observed and recorded from 12<sup>th</sup> – 2<sup>nd</sup> century BC.



Armillary and acacia by Zhang Heng (78-139 AD). Nanyang, Henan



Abridged armillary by Guo Shoujing (1231-1316 AD). Nanjing, Jiangsu

**The works of Euclid of Alexandria, Claudius Ptolemy, Nicolaus Copernicus, Tycho Brahe were translated, introduced to and practiced by Chinese astronomers in late Ming dynasty, following the arrival of Jesuit priests (Matteo Ricci, Nicolaus Longobardi, Giacomo Rho, Johann Schreck, Johann Adam Schall von Bell).**

**In 1644, Johann Adam Schall von Bell was appointed Director of the Imperial Observatory, the first time the position is held by a foreigner.**

Xu Guangqi (1562-1633)



Matteo Ricci (1552-1610)



Johann Adam Schall von Bell (1592-1666)



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编: 650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# China and Chinese astronomy in the early 20<sup>th</sup> century

**1912 Fall of the Qing Dynasty**

**1912-1949 Republic of China**

**1937-1945 War of Resistance against Japan**

**1945-1949 Civil war, KMT forces defeated and withdrew to Taiwan**

**1949-present People's Republic of China**

**1950-1953 Korean War, an armistice but no peace treaty signed**

**1880- Several observatories built by Jesuit priests**

**1922 Chinese Astronomical Society (CAS) founded**

**1947: 688 individual members, 6 institution members**

**1934 Purple Mountain Observatory inaugurated**

**1935 China joined the IAU (the 26<sup>th</sup> national member)**

**Adhering Organization: NCA at Nanjing (associated with PMO)**

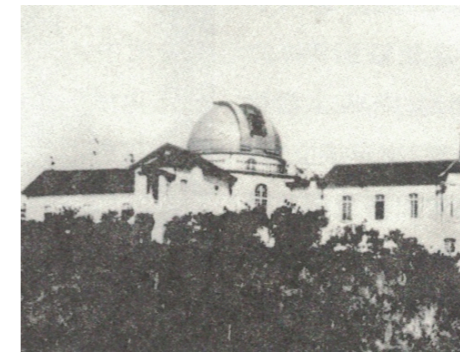
**1935 GA V, Paris, 2 participants, 4 individual members (11 in 1938)**

**1955 GA IX, Dublin, 4 participants (arrears cleared in 1947, 1955)**

**1958 GA X, Moscow, 7 participants**



Qingdao 1898



Sheshan 1900



Xujiahui 1880



Cai Yuanpei (1868-1940)



Gao Lu (1877-1947)  
Université Libre de Brussel



Yu Qingsong (1897-1978)  
Lick Observatory



Sun Yet-sen University  
Observatory 1929



Purple Mountain Observatory  
1934 September 1



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编: 650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# The conflict

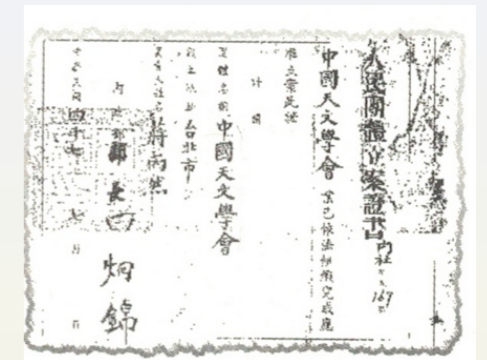
The “application” for membership of the Union from the ROC, submitted in late April and early May 1958, just over two months before the Moscow GA, was **not initiated by astronomers of the island** (few if any at the time), **but orchestrated by the US government** in order to further isolate PRC after the Korean War, at the height of the Cold War.

It came at a time when the US NCA was about to submit their invitation to the EC to host the 1961 GA in Berkeley, after the 1958 GA X in Moscow. The plot by the US Department of State, using visa to the US as a threat, was deliberately designed to (one stone, three birds),

- Block astronomers from “communist” mainland China;
- Promote the status of “Free China (Taiwan)”;
- Create the so-called “Two Chinas” or “One China, one Taiwan” problem.

The plot was opposed by Leo Goldberg (National Committee of the IAU), Otto Struve (former IAU President and still consultant to the EC), and Detlev Wulf Bronk (President, National Academy of Sciences), worrying that this would tarnish the US scientific reputation.

In spite of pressure from the US government, the EC decided to postpone any decision until after the Moscow GA, in recognition “the serious implications” that “acceptance of the Taiwan application during the Moscow meetings might have had: **immediate withdraw of mainland China from the IAU, and possibly also that of USSR, the host**”. (*History of the IAU*, A. Blaauw, p.193 )



The “Chinese Astronomical Society” in Taipei was only established in July 1958, two months after the submission of the application.



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



**Goldberg contacted his representative in the U.S. Congress, George Meader, a conservative and fair-minded Republican, who presented the case to Dulles, who referred it to his science advisor Wallace Brode. Brode promptly demanded that Taiwan be invited to the IAU.**

**The fact that Taiwan then had no astronomers and would have to qualify for IAU membership in the approved way meant nothing to the militant anti-Communist Brode. Brode wanted Goldberg to go to the 1958 Moscow meeting and submit the 1961 invitation but with the condition that Taiwan be admitted at once. Such a demand could well wreck the IAU. From Brode's point of view, if the astronomers would not go along with his orders, so much the worse for them.**

**— Biographical Memoirs, U.S. National Academy of Sciences, 1997 (from *Under the Same Starry Sky History of the IAU*, C.-Q. Fu and S.-H. Ye, p. 154)**



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# Admission of Taiwan and Withdraw of Mainland China

Unfortunately, after the Moscow meetings, the attitude of the EC made a U-turn. In spite of opposition by the Vice Presidents from the USSR and Czechoslovak, who stated that admission should be judged solely on scientific grounds, that the astronomical activity in this applicant's country was too low, and that the admission of Taiwan might risk the withdraw of mainland China, the EC pushed through the admission by the **ballot**, 5 votes for and 2 against.

Zhang Yu-zhe (Chang Yu-Cheh), President of the Chinese Astronomical Society at Nanjing, in his letter to J. H. Oort, serving President of the IAU, expressed surprise and indignation:

“--- Taiwan is an inseparable part of Chinese territory, it is a province of China. --- Should the report be authentic, I, on behalf of the Astronomical Society of the People's Republic China, hereby lodge our strong protest with you and insist that the Executive Council of IAU rescind the illegal decision ---. Otherwise, the Astronomical Society ---- will resolutely and definitely withdraw from the IAU” (*History of the IAU*, A. Blaauw, p.193 )

**IAU Information Bulletin No. 2 of November 1959** announced the adherence of Taiwan as a member of the IAU. The withdraw of mainland China was announced in **Bulletin No. 3 of May 1960**. The rapid announcements underscored the acceptance as a “**fait accompli**”.

The EC further brushed aside letters of protest from the Polish and Bulgarian Academies sent in March 1960, as well as concerns raised by Vice-President O. Heckmann during the 1961 Assembly. Also during the Assembly, President Oort, in an unusual move, before the vote, asked representatives to vote against a combined motion submitted by the USSR and Czechoslovakia Academies of Sciences requesting the decision of the EC to admit Taiwan be invoked.

**The decision of the EC, succumbed to the political pressure from the US government, led to the two-decade absence of astronomers of China mainland from the international stage of astronomical collaboration and exchange.** Squeezed between the demands of the then two superpowers, the United States and the Soviet Union, the IAU survived but unfortunately **clearly damaged**.



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



# The Return of China

In the following two decades, in spite of the growing dissatisfaction and concern, restrained by the then prevailing political environment, both international and domestic, little progress was made on the restoration of the legitimate position of China within the IAU until the **1979 Montreal Assembly**.

- 1971 UN Resolution No. 2758 restored PRC's membership and expelled ROC;
- 1972 Richard Nixon visited China. The joint communique recognized Taiwan as a part of China, ushering in a new era of Sino-American relations
- 1976 End of the Cultural Revolution in mainland China;
- 1978 Start of China economic reform and opening-up;

The key was to find “a way acceptable to the Chinese of reinstating their membership in the IAU without expelling Taiwan, an action that would violate the statutes of the Union”. (Leo Goldberg, opening address at the 1976 Grenoble Assembly)

Initiated by President Adriaan Blaauw, under the invitation of the EC, a six-member delegation from the mainland China, headed by Zhang Yu-zhe (Chang Yu-Cheh), President of the Chinese Astronomical Society, and a single-member delegation from Taiwan consisting of C. S. Shen, President of Taiwan NCA, arrived in Montreal to discuss the matter prior to the GA on August 13-24 1979, and explore the possibility of “**dual membership**”, that, on the one hand, expresses the **indivisibility of China (emphasized and agreed by both parties across the Strait)**, and, on the other hand, reinstates the membership of PRC without blocking Taiwan's further adherence.



The Chinese mainland delegation in Montreal. From left to right, Zhu Jin-ning, Hong Si-yi, Zhang Yu-zhe, Yi Zhao-hua, Ye Shu-hua, Zhao Xian-zi.



Shen Jun-shan  
(C.S. Shen)



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

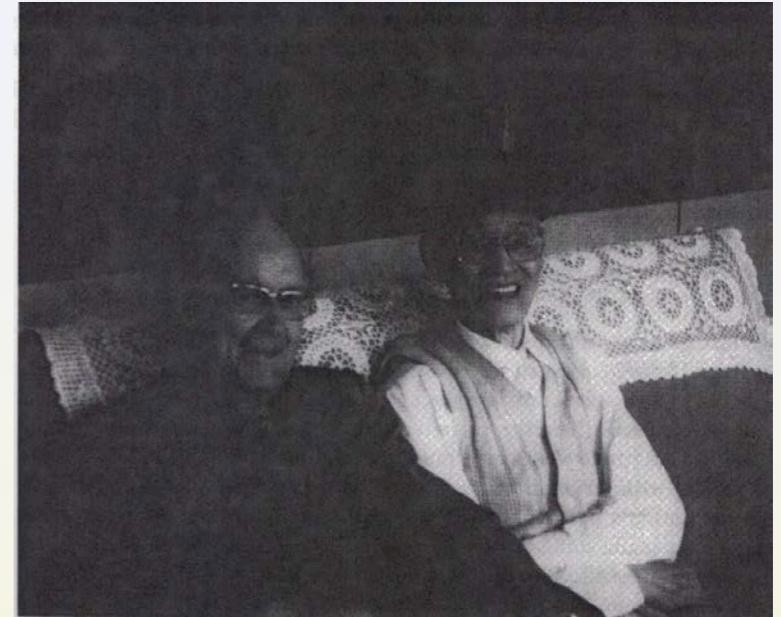
Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



**The negotiations resulted in a proposal communicated to the GA at its closing session, that was presented in the form of an exchange of letters dated Montreal, August 22, 1979, between the President of the Chinese Astronomical Society, Zhang Yu-Zhe, and the President of the IAU, Adriaan Blaauw. The two letters were reproduced in full in IAU Transactions Vol. XVII.**

(Transactions of the International Astronomical Union, Volume 17, Issue 4, 1979, Report of the XVIIth General Assembly of the International Astronomical Union, pp. 48-50)



Zhang Yu-Zhe (Chang Yu-Che, 1902-1986), President of the Chinese Astronomical Society (1943-1982), with Adriaan Blaauw in Nanjing in May 1986, after the IAUS125 on neutron stars.

Parts of the letter from Zhang Yu-Zhe, President of the Chinese Astronomical Society (1943-1982), to Adriaan Blaauw, President of the IAU (1979, Transactions of the International Astronomical Union, Volume 17, Issue 4, Appendix IV. pp.525-527)

reiterating that the Chinese Astronomical Society opposes any solutions which can suggest the existence of "two Chinas" or "one China, one Taiwan";

the Chinese Astronomical Society proposes to the IAU Executive Committee

a) that for the time being dual adherence should be introduced, the adherence and the adhering bodies to be specified as:

China { Chinese Astronomical Society (Purple Mountain Observatory, Nanking)  
(a name for the adhering organization representing the astronomical community of Taiwan; for this name we propose "Chinese Taiwan Astronomical Society" or, provisionally, as reference "Astronomy Taiwan, China"; the name to be established by the IAU Executive Committee in consultation with the two adhering organizations);



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编: 650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



**The problem of the name of the adhering organization at Taiwan was shortly solved in 1980. The arrangements were ratified at the 1982 Patras GA XVIII.**

**The solution, accepted by all the parties involved, is that **China is to have two adhering organizations**, with China mainland astronomers represented by the **Chinese Astronomical Society** located in Nanjing (China Nanjing) and China Taiwan astronomers represented by the **Academia Sinica** located in Taipei (China Taipei). **The denominations, “China Nanjing” and “China Taipei” represent the IAU official resolution and should be used in all IAU events.****

1983, Transactions of the IAU, Vol. 18, Issue 2, p.25

**RESOLUTION A1:**  
**Ratification of IAU Membership of China**

The General Assembly  
*noting* that progress has been achieved in restoring full adherence to the IAU of China, as was anticipated at the XVIIth General Assembly of 1979 at Montreal, and that agreement was obtained by 1 May 1980 on the mode of listing, in the official list of member countries, two adhering bodies for China as a temporary measure,

*ratifies* the arrangements made by the Executive Committee for the adherence of China to the Union during the period elapsed since the XVIIth General Assembly.

1983, Transactions of the International Astronomical Union, Volume 18, Issue 2, VI Astronomers handbook

424 **ASTRONOMER'S HANDBOOK**

Country	Adhering Organization	Year	Members
CHINA	Chinese Astronomical Society Purple Mountain Observatory Academia Sinica Nanking	1935	93
	Astronomy Union located at Taipei, China Taipei Observatory, Taipei, Taiwan	1959	16

<https://www.iau.org/administration/membership/national/>

Home / Administration / Members Administration / National Members

## National Members

Organizations representing national professional astronomical communities, desiring to promote their participation in international astronomy and supporting the objective of the Union, may adhere to the Union as National Members. Organizations desiring to join the Union as National Members while developing professional astronomy in the community they represent may do so on an **Interim** basis or **Prospective** basis. They may later become National Members on a permanent basis.

Total: 73 National Members

### MEMBER ORGANIZATION

Argentina	Consejo Nacional de Investigaciones Cientificas y Tecnicas
.....	
China, Nanjing	Chinese Astronomical Society
China, Taipei	Academia Sinica

## China, Nanjing

Year(s) of Entry	Member Status	Category	Total Members
1935	Member	VI	666

### Adhering Organization address

Chinese Astronomical Society  
 Purple Mountain Observatory  
 2 West Beijing Road  
 Nanjing 210008  
 China, Nanjing

Phone: +86 25 3302147  
 Fax: +86 25 3301459  
 Email 1: jiyang@pmo.ac.cn  
 Email 2: cas.nj@pmo.ac.cn  
 Organization website: <http://english.cas.cn/Eng2003/page/home.asp>

## China, Taipei

Year(s) of Entry	Member Status	Category	Total Members
1959	Member	II	74

### Adhering Organization address

Academia Sinica  
 Department of International Affairs  
 128 Academia Rd Sec. 2  
 Nankang  
 Taipei 115  
 China, Taipei

Phone: +886 2 2789 9446  
 Fax: +886 2 2783 4496  
 Email: hrh@gate.sinica.edu.tw  
 Organization website: <http://www.asiaa.sinica.edu.tw/>



中华人民共和国云南省昆明市呈贡区大学城  
 云南大学中国西南天文研究所  
 邮编: 650500

Southern-Western Institute for Astronomy Research  
 Yunnan University, Chenggong, Kunming 650500  
 P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>

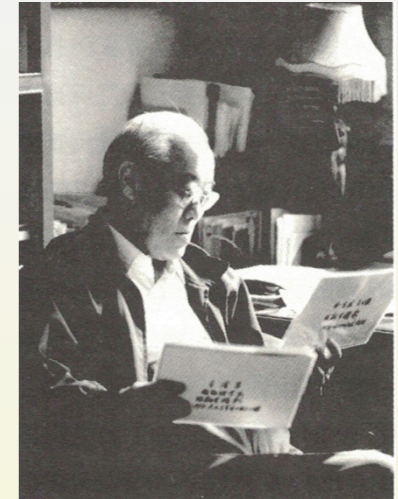


**The Union had succeeded in overcoming political schism and in restoring harmony again among its membership for its prime purpose: the unhampered pursuit of scientific research and intercourse. (History of the IAU, A. Blaauw, p.204)**

Speech of Wang Shou-guan on behalf of the Chinese Astronomical Society after the ratification of the membership of China by the GA (1983, Transactions of the International Astronomical Union, Volume 18, Issue 2, p.26)

**Dear friends & colleagues,**

**The Chinese Astronomical Society celebrates its 60<sup>th</sup> anniversary this year. Its reunion with this international community today is an event that is highly appreciated by all its 900 members. I and my colleagues here are very glad to have this opportunity of speaking on behalf of our Society and its members to express our most cordial greetings and most sincere thanks to you all. Thank you!**



Wang Shou-guan  
President of the Chinese  
Astronomical Society (1985.12  
– 1989.2)

**--- the Union has really never been free of political interference from many directions ever since. Perhaps **the most conspicuous example of such an interference is recent years was the technical expulsion of the (People's) Republic of China**, which was eased out of our midst in 1955 (1960) by the United States (during the enlightened era of John Foster Dulles), in collaboration with certain astronomers from Western Europe. Only God knows what good should have come to the science of astronomy and to the International Astronomical Union from severing (albeit temporarily) **its official ties with the most populous nation** of the Earth; but such acts did happen, and will continue to happen as long as the present structure of the IAU remains unchanged.**

**— Zdeněk Kopal, The IAU — the first 60 years Reminiscences and Reflections, 1982, Astrocosmos, p.5**



中华人民共和国云南省昆明市呈贡区大学城  
云南大学中国西南天文研究所  
邮编：650500

Southern-Western Institute for Astronomy Research  
Yunnan University, Chenggong, Kunming 650500  
P. R. China

<http://www.swifar.ynu.edu.cn/index.htm>



 INQUIRIES OF HEAVEN 

IAU 28TH GENERAL ASSEMBLY, BEIJING, CHINA, AUGUST 20 - 31, 2012

FRIDAY, AUGUST 31, 2012 DAY 10



IAU Members in Action!

Nominations  
From Special Nominations Committee for EC

- President-elect, Silvia Torres-Peimbert (Mexico)
- Assistant General Secretary, Piero Benvenuti (Italy)
- Vice President, Renee Kraan-Korteweg (S. Africa)
- Vice President, Xiaowei Liu (China Nanjing)
- Vice President, Dina Prabhik (Israel)

 INQUIRIES OF HEAVEN 

IAU 28TH GENERAL ASSEMBLY, BEIJING, CHINA, AUGUST 20 - 31, 2012 WEDNESDAY, AUGUST 22, 2012 DAY 3

EXPLORING THE VAST UNIVERSE HAND IN HAND, WORKING TOGETHER TOWARD A BETTER FUTURE FOR HUMANKIND  
- SPEECH AT THE OPENING CEREMONY OF THE 28TH IAU GENERAL ASSEMBLY

Dear honored chairman, ladies, gentlemen, and friends,

Today, more than 2000 astronomers from all over the world gather together in Beijing to attend the 28th General Assembly of the International Astronomical Union. This is a grand event for astronomy. It is the first time for China to host an IAU General Assembly since China joined the IAU in 1955. On behalf of President HU Jintao, the Chinese Government, and the Chinese people, I am here to express our warm congratulations to this General Assembly, and express our sincere gratitude and cordial welcome to all attendants.

Astronomy, as the science to explore the universe, is one of the most important and the most active scientific frontiers that has pushed forward natural sciences and technology, and led to the advances of modern society. It has tremendously important influences on the progress of other branches of natural science and the development of technology. The vast expanse of space always stirs the curiosity of human beings on the earth, fascinates them, and has attracted generations after generations to devote themselves to the exploration of the universe. As the science to study the position, distribution, motion, morphology, structure,



Xi Jinping  
Vice President, the People's Republic of China

transformation of the world, are the creative products of scientists only after their persistent exploration and long term accumulation. Only working in full devotion, exploring with never-ceasing steps, furthering continuously on the shoulders of giants, can one reach the pinnacles of science and drive the progress of humankind.

Thirdly, the development of science and technology requires to continuously emphasize and strengthen basic research. Astronomy as an observational science is a very crucial field of basic research. Such a field requires strategic plans for deployment in advance, with full respect to the internal logic of research activities and their long-term benefits. We will make larger and larger investments in such a field and ensure their execution, provide long-term and stable support to scientists, so that the scientists can discover, invent, create, and advance constantly, and make more and more achievements that will benefit humankind.

Fourthly, the development of science and technology requires broad and sound support from the public. Science and technology are a noble course that both benefit and rely on society, and the full development requires not only public understanding from all sides, but also

LLIAMS

of a variety of phenomena, from the collapse of clouds that lead to star formation to accretion and jet outflows, and especially to the formation of structure from the early universe quantum fluctuations. Take your pick!

Q: What is your assessment of this IAU General Assembly?

A: From my standpoint, it has gone extremely well. The quality of the talks that I heard was quite high. We were successful in attracting Vice President XI Jinping of China to the Opening Ceremony to give an address that affirmed his solid support for science and especially astronomy. I believe the NAOC and LOC have done superb work in arranging so many details. All of the Chinese representatives have been very gracious and understanding. I have been impressed how such a complex event like this can go so smoothly. I give my heartiest congratulations to the Chinese organizers.

I must say that the Inquiries of Heaven daily

