CPPCC holds press conference ahead of annual session

[unable to retrieve full-text content] The National Committee of the Chinese People's Political Consultative Conference (CPPCC) held a press conference on Thursday afternoon, one day ahead of the top political advisory body's annual session.

Riding an asteroid: China's next space goal

After sending a probe to Mars in 2020, China plans to explore three asteroids and land on one of them to conduct scientific research, according to a Chinese asteroid research expert.

The "China's Space Activities in 2016" white paper, issued by the Information Office of the State Council recently, also mentioned asteroid exploration in outlining the major tasks of the country's space industry in the next five years.

Ji Jianghui, a researcher at the Purple Mountain Observatory of the Chinese Academy of Sciences and a member of the expert committee for scientific goal argumentation of deep space exploration in China, took part in expert discussions on the main scientific goals of China's deep space exploration in the next two decades.

The committee basically decided to conduct expeditions to asteroids and then Jupiter and its moon system after the Mars expedition.

"The experts' plan is to fly a probe by an asteroid, to fly side by side with an asteroid for a period, and to land on a third one to conduct in situ sampling analysis on the surface," said Ji.

So far, only the United States and Japan had landed probes on asteroids. Japanese probe Hayabusa 1 landed on the asteroid Itokawa, and brought samples back to Earth.

"China will send the Chang'e-5 lunar probe to the moon and bring samples back in 2017. If that mission succeeds, it would mean China, like Japan, would be able to bring back samples from asteroids to study in labs on Earth in the future," said Ji.

Scientists would give priority to detecting near-Earth asteroids to analyze

their probability of colliding with Earth.

At the same time, they are eager to study the formation and evolution of asteroids, which might shed light on the origins of the solar system, as well as the origins of life and water on Earth.

Chinese scientists plan to fly a probe side by side with an asteroid called Apophis for a period to conduct close observation, and land on the asteroid 1996 FG3. The probe is also expected to conduct a fly-by of an asteroid to be selected according to the launch time. The whole mission would last around six years, said Ji.

THREATS FROM SPACE

Discovered in 2004, Apophis is about the size of two football fields, with its longest diameter at about 394 meters. Analysis shows it will come very close to Earth in 2029, missing our planet by some 30,000 kilometers. The distance, a hair's breadth in astronomical terms, is within the orbit of the moon, and even closer than some man-made satellites. It will be the closest asteroid of its size in recorded history. The asteroid is supposed to come around Earth again in 2036.

Apophis was believed to pose a big threat to Earth when it was first discovered. More than 100 scientific groups around the globe are studying it. Further study has shown it has only a 1-in-a-million chance of hitting the Earth in 2029.

Although we don't have to worry about Apophis for the time being, scientists estimate there are about 300,000 near-Earth objects with a diameter over 40 meters, and only 3 percent of them have been discovered. An international asteroid warning network was set up in December 2013 to monitor potential threats.

As a member of the warning network, China's Purple Mountain Observatory, discovered three new near-Earth asteroids — 2017 BK3, 2017 BM3 and 2017 BL3 — in January this year, and 2017 BL3 poses a potential threat to Earth, said Ji.

"In order to cope with the potential threat of the near-Earth objects, we need not only ground-based telescopes to form a monitoring and warning system, but also space probes to conduct close investigations of the asteroids to study their physical characteristics, interior structure and content," Ji said.

China's asteroid exploration will help scientists better understand the basic features of the near-Earth objects, and seek effective measures to deal with the possibility of a collision, said Ji.

ORIGINS OF LIFE?

Some scientists believe asteroid 1996 FG3 might hide the secret of the origins of life on Earth.

At present, there are two main theories about the origins of life. One is that life was conceived on Earth itself, and the other is that life originated in outer space. Scientists have discovered many meteorites containing organic compounds, which are believed to be related to the origins of life.

Many asteroids also contain water. And some scientists believe the water on Earth might have been brought by asteroids or comets.

"Scientists have conducted many ground-based astronomical observations on asteroid 1996 FG3. Spectral analysis shows that it is a carbonaceous asteroid, and it's very likely that it contains organic components which are needed for the origins of life," Ji said.

China has already conducted a fly-by observation of an asteroid named Toutatis.

On Dec. 13, 2012, China's second lunar probe, Chang'e-2, after successfully completing its mission, rendezvoused with Toutatis at a distance of 770 meters, as the space rock, bigger than a city block, swept by Earth at a distance of around 7 million kilometers.

It was the world's first close fly-by observation of Toutatis. The probe took high-resolution images providing a number of discoveries.

Ji and his collaborators conducted intensive research, finding the ginger-root-shaped asteroid is about 4,750 meters long and 1,950 meters wide. They studied how it rotated in space.

The research also revealed new insights into the geological features and formation of the asteroid, showing it was essentially rubble and that the impact craters on its surface could be 1.6 billion years old.

<u>Post-80s judge 'battle-hardened'</u> <u>against corrupt officials</u>



Jiang Wei.[Photo/Official Weibo account of Beijing First Intermediate People's Court]

When talking about open trials of cases involving corrupt officials, Jiang Wei, a post-80s judge from a court in Beijing has had more experiences than almost anybody else.

After graduation from Tsinghua University's School of Law with master's degree in 2005, Jiang joined Beijing First Intermediate People's Court and later became a criminal court judge, according to Beijing Evening News.

In 2014, he was appointed as the vice-presiding judge of the court's No 2 Criminal Tribunal, as he was one of the youngest and brightest judges in the country's judicial system.

In the nationwide fight against corruption launched in 2012, the fall of two "big tigers", or high-ranking officials, impressed him the most.

One was Tian Xueren, former deputy governor of Jilin province, who was in 2013 charged with receiving 85 bribes worth more than 19 million yuan (\$3.1 million) from 1995 to 2011.

Jiang Wei still remembers the morning of Nov 1, when he was sitting across Tian Xueren at the courtroom of No 2 Criminal Tribunal. As the presiding judge of the trial, he announced the judgment in a strong voice that Tian Xueren was sentenced to life imprisonment, deprived him of political rights for life, along with the confiscation of the money he received in bribes. Tian pleaded guilty and didn't appeal to a higher court.

On July 17, 2014, at the same court, Jiang Wei announced another significant verdict: Wang Suyi, former head of the United Front Work Department in the Party's Inner Mongolia committee, was sentenced to life imprisonment for

accepting bribes. He was accused of taking bribes worth more than 10.73 million yuan (\$1.71 million). Like Tian, Wang didn't appeal to a higher court.

Facing the "big tigers", Jiang admits sentencing the "big tigers" was a high pressure job as he had to make sure that the judgment was as fair as possible.

"Sometimes it's like a contest between you and the defendants," Jiang Wei said. When referring to Wang Suyi, Jiang said during the first arraignment, he told Wang that it's him who made Tian Xueren's verdict last year, "When they know you're an experienced judge, they will respect and cooperate with you better." Jiang said.

Jiang has so far handled a dozen of corruption cases concerning ministerial-level officials, with the highest illicit money from a case reaching over 20 million yuan (\$3 million).

"The proceeding of criminal cases usually take seven or eight months, not counting some cases with several supplement investigation," Jiang said. Unlike the civil cases, criminal cases involving corruption and delinquency are more complicated and time-consuming.

In addition, Jiang has dealt with several major white-collar crime cases involving real estate, commerce, internet, among which the highest value of case recorded was 396 million yuan (\$57.7 million).

"In general, a copy of the written judgment contains 20,000 to 30,000 words, and needs at least four or five revisions." Jiang said. "Even a tiny mistake in high-profile cases can have major consequences." he said.

Over the last couple of years, Jiang has dealt with more than 140 cases, and not a single lawsuit or complaint has been filed in any case.

"I like being a judge; it's a mentally challenging work." A competent judge must work hard and make decisions after serious considerations.

"When I became a judge 10 years ago, I decided to devote myself to this job." Jiang said.

Shenzhen uses tech to stop jaywalking



A display screen is set up at the crossroad near the Liuxian Primary School. [Photo/sina.cn]

Shenzhen police have set up an intelligent system to stop pedestrians from jaywalking. Violators will be recorded by the country's personal credit system.

The high-tech system created by traffic police of Nanshan District consists of several parts, including a video collector, controller, display screen, turnstile, front-end computer and voice broadcast system.



A turnstile is part of the intelligent system created by Nanshan traffic police. [Photo/sina.cn]

When the red light is on, turnstiles will be closed, and the voice broadcast will remind pedestrians to stop and wait. If anyone forces their way through the turnstiles, his or her face will be captured by the CCTV and the violation will be recorded in the social credit system.

According to a local police officer, the system can also change the rotation intervals of the turnstile based on computation, which will provide more convenience for pedestrians, especially aged and disabled people.

Shop prices down again, disposable income up

Yesterday the BRC published its latest shop prices index. Over the last year prices are down by 1%. This is a smaller fall than recent figures, but shows there is still fierce competition on the High Street and on the internet, with the overall balance of prices under good control.

Asda also published its latest disposable income tracker. This showed disposable income up by 3.5% over the last year. All this has happened at a time when oil prices have risen sharply, with a big effect on domestic fuel and vehicle fuel. Fuels are up 17% over the last year, and are the main force behind the rises in the CPI and the RPI.

I was expecting further rises in inflation as the rise in world commodity prices flows through, and as we get further rises in electricity, services with a large wage component, and the usual local and national government increases in fees and charges. So far UK inflation has been running in parallel to German and US inflation, which have also risen rapidly from a very low base mainly owing to fuel prices.

Lots of forecasters are still refusing to look at the figures that are coming out. Many still say there will be a sharp rise in prices from lower sterling, which they wrongly think has mainly occurred after the referendum vote instead of before. This they think will then remove all real growth in incomes and weaken the economy. They are overdoing the gloom.

The property valuers have some explaining to do. They have been warning of immediate post referendum declines in City offices. Yesterday British Land announced it has sold the Cheesegrater, a large modern well let City office block, for £1.15bn, which is 25% above the September 2016 valuation! The yield is only 3.4% on the good rents signed up. Will we have some apologies over all that red ink they spilled last summer?