D. School 551

Chapter 551 - Kadarashe

The young and born institute is not ranked high in the country, and coupled with the low profile, so the addition of Ma Yang did not cause much movement in the team. A group of younger researchers were working around this time. East, and the academician Nie, who is the head of the delegation, asked about the situation of iter. "Nie Lao, can you tell us why the International Thermonuclear Reactor Program put the experiment in France? Not the United States?"

"You are the right person to ask this question!" As an elder, Academician Nie also likes to teach these young people some life experience, "The International Thermonuclear Experimental Fusion Reactor Project was first proposed in 1985, and its founding members participated in the state-owned EU 15 member states, Canada, Russia, and Neon. The United States first joined and announced its withdrawal in 1998, and re-entered it only in 2003. Our country also formally participated in consultations starting in 2003. The location of the test reactor is 01 Since the beginning of the year, at that time, the United States was not a member country, so it did not participate in the competition for site selection. Moreover, the United States has more experimental reactors. I am afraid that even if they were in the organization at that time, they would not necessarily be interested in experimenting. Pile up in the country. "

"Initially, there were four countries including France, Neon, Spain, and Lucia." Academician Nie took a sip of water and continued his voice. "Among them, Spain and Lucia have withdrawn from each other for various reasons. The proposed six villages in Aomori Prefecture and the French proposed that Cadarache near Marseille become the final two candidates! "

"Neon's reason is that Rokkasho Village is close to the port, which is convenient for transportation of facilities, and there is a rice army base nearby. Safety is not a problem. Colleagues are also willing to provide 30% of the funding for the plan. Rice and South Korea support this plan.; France proposes that Cadarache is not far from Marseille Port. Both sides are geographically indistinguishable, and Cadarache has a part of existing research facilities, and the climatic conditions are more superior than the six villages. In addition, France The nuclear energy research is strong and the management level is high. Therefore, Cadarache should be the first choice. China, the European Union and Lucia support this plan! The whole organization has fought two battles and launched a fierce competition! "As this event Participant, Academician Nie remembers these details very clearly.

"The controversy continued until 2005, when the EU first lost patience. They announced that no matter who wins this competition, they will build an experimental reactor in Cadarache, plus the small bush of the President of the United States believes that the United States wants to start from The Iraqi war quagmire was inseparable from the support of the European Union, so the United

States announced its abandonment of support for neon. Attitude changed to neutral. Neon lost its biggest supporter and could not compete with France simply by relying on its own strength with South Korea. Conditional support for Kadarashe! "Speaking of academician Nie here, she shook her head." Only one location has been arguing for so long. I don't know when I want to wait until the research is successful! "

"What conditions did Neon put forward in the end?" Someone continued to ask, and had to say that Academician Nie had a good level of storytelling, and they could not stop hearing it.

"They demanded 20% of iter 's jobs, and also won a lot of raw material supply contracts, while reducing the proportion of their own funding to 10%; so iter 's final funding allocation plan became the EU to bear 4.6 billion euros in total construction costs 40% of them, and the remaining 60% are shared by 10% each in France, America, Neon, South Korea, Lucia and us ... "Mayan, who heard the crowd here, could not help shaking his head. This fund is far worse than Xi and the plan. Even Xi and the plan have less than one year of funding. In this case, if they lose to iter. So there is no face to see people!

"Okay, boarding has already begun, let's get on the plane first!" The boarding notice on the broadcast interrupted the heated discussion, and the group boarded the flight to Marseille with their luggage.

After a long flight, the plane finally landed at Marseille Provence Airport. Due to the fatigue of the journey, the staff that iter came to greet took them to a hotel for a night's rest, and then re-departed to Cadarache the next day.

Along the way, there were occasional complaints about not having time to taste Marseille's food, but more was still curious about this controllable nuclear fusion experimental reactor, which in their opinion was the largest investment. Of course, this is the biggest thing they think, and it must be double quoted here.

Cadarache belongs to the Rhone Estuary in southeastern France. Located sixty kilometers northeast of Marseille, it was formerly the headquarters of the French Atomic Energy Commission (CEA). There are 2,300 staff members of the French Atomic Energy Commission and 860 staff members of relevant units. Before the start of the iter project, the annual research funding here is about 400 million euros; ordinary people may not have heard of this name, but in the minds of these scientists The famous, comparable to the existence of Geneva, Switzerland and the small town of Clinton, Tennessee (the location of Oak Ridge National Laboratory).

Since French President Charles de Gaulle proposed France's own atomic energy plan in 1959, this has become the center of French atomic energy research, and it has a history of fifty years! A long fence fence encloses 900 hectares of land. After verifying his identity, Ma Yang followed the team into this technological town with a long research history.

"Hello, Academician Nie, welcome you, colleagues from China!" Ronald Vigo, a high-level commissioner of cea and an important figure in France in iter, greeted them warmly You have prepared the accommodation, you can go to the accommodation to put down your luggage for a little rest, and then I will take you to visit. "

The cooperation between France and Huaguo in related fields has been going on for some time, and it has also helped Huaguo to cultivate many useful talents. Since 2004, the two sides have established a joint laboratory, also called a wallless laboratory, to further deepen Cooperation between the two parties in this field. There are also many people in the Xihe plan who have worked here, but unfortunately Lu Qiujian feared that they might have loopholes, so he did not send them over.

After coming to the room for a short break, Ma Yang followed Academician Nie and others and accompanied Mr. Vigo to start a visit in Cadarache. They first went to the wallless laboratory to learn about the latest research results of scientists from the two countries. And went to other laboratories of cea, and had an eager exchange with French colleagues.

It wasn't until the afternoon that Godby brought them to the periphery of the international thermonuclear reactor under construction and introduced in the proud tone of the Gauls, "Gentlemen, this is the construction site of the world's largest controllable nuclear fusion reactor!"

Chapter 552 - Ha ha

Standing in front of a busy construction site, Ronald Vigo pointed to the building under construction and began to introduce the situation of the international thermonuclear fusion reactor. "The iter device still follows the operation principle of the Tokemark device. It's just that the experimental device we built has a larger scale and a higher energy level! "

"What will be installed at that location is the core component of the iter device-a high-temperature deuterium-tritium plasma ring." Vigo's fingers changed direction. "There is a plasma current of 15 megaamperes, and the nuclear fusion reaction power is 500,000 kilowatts. , Releasing as many as 1020 high-energy neutrons per second. The plasma ring is in the ring-shaped jacket of the shielding cladding. The shielding cladding will absorb 500,000 kilowatts of thermal power and all neutrons produced by the nuclear fusion reaction. "

"The design principle is nothing new! But such a large power is not comparable to our experimental device!" Some people in the Chinese delegation expressed their opinions in a low voice.

"A few milligrams of mixed gas of deuterium and tritium is packed into a small ball with a diameter of about a few millimeters, and then the laser beam or particle beam is evenly injected from the outside, and the inner layer of the spherical surface is squeezed inward. The gas in the ball is squeezed, The pressure rises and the temperature rises sharply. When the temperature reaches the required ignition temperature, the gas in the ball explodes and generates a lot of heat energy. Such an explosion occurs three or four times per second and continues continuously. Existing Most of the controlled nuclear fusion experimental devices use this method! "Someone was born to be reconciled. Speaking of these words, the representatives of China not only gave birth to a sense of pride, but the founder of this theory is the old one of China. Mr. Wang Ganchang, a generation scientist.

"Hey, the more you invest, the more you hope to achieve results! Our country allocates only one billion dollars to controllable nuclear fusion research every year, and it has to be distributed to so many units! If this situation does not change, the future For a long time we have to chase after the country and iter! "Academician Nie sighed and couldn't help grunting. "At the end of last year, I repeatedly found funds from higher authorities to apply for funding, but it turned out! It was still only that!"

"Yes, how can we experiment without money!" This sentence caused a echo at the scene. Only Ma Yang showed a smile at the corners of the crowd's lips, and the country is not without big investment in this field. It 's just not given to you!

"Don't talk about doing experiments! We can't recruit people without funding. As soon as Xi and the plan came out, no matter in the field of superconductivity or lasers, they were robbed by them! If I said that aerospace technology is important, but there is no With controlled nuclear fusion, there will be no fundamental development in aerospace technology! "The topic has gradually developed in a direction that worries him before he has been happy for a long time.

"Mr. Vigo, what kind of installation is being built over there?" Ma Yang's fear of these people caused an inappropriate association with the staff of iter, so he quickly stood up and asked.

"That is a ring-shaped superconducting magnet. It can generate a ring-shaped strong magnetic field of 5.3 Tesla. It is one of the key components of the device. This device will cost 1.2 billion US dollars." Mr. Vigo did not seem to notice Hua Guo The discussion of the scientists continues to be introduced to you, and when he said that he was proud of his tone when he said about 1.2 billion US dollars, in his view, except for this country and the United States, I am afraid that no country can come up with such a big hand, "A large superconducting coil tube passes through the center of the

ring, and there are six large ring-shaped superconducting coils outside the ring field coil, that is, the pole field coil. The role of the central solenoid and the pole field coil is Generate plasma current and control plasma configuration. High-temperature deuterium-tritium plasma ring and ring-shaped superconducting magnet are covered in a large dewar. Sitting on the base, it constitutes the body of the experimental reactor. "

Mr. Vigo 's fingers pointed around the body and reported the names of the devices and their basic parameters. "Outside the main body are four 10 MW high-current particle accelerators, a 10 MW steady-state millimeter electromagnetic wave system, a 20 MW RF wave system and dozens of advanced plasma diagnostic measurement systems. The entire system also includes: Large power supply system, large tritium factory, large water supply (including deionized water) system, large high vacuum system, large liquid nitrogen, liquid helium cryogenic system, etc. All possible adjustments and maintenance in the iter body are through remotely controlled robots Or robotic hand. "

"Gentlemen! The iter device represents the world's highest achievement in controlled nuclear fusion research, and it also uses top technologies in many fields, such as large superconducting magnet technology, medium energy high current strength accelerator technology, continuous, high power millimeter wave technology. Complex remote control technology, etc. "After introducing the device, Mr. Vigo raised his chest. As if to say come and worship, come and praise our powerful strength!

really. As soon as his words fell, Academician Nie took the lead in applauding. Then the applause of other representatives of China also sounded, and Mr. Bi Ge's chest was even higher in the applause.

"Iter really deserves to be a joint product of several major technological powers in the world! Both the scale and efficiency are much stronger than our current experimental device! Even the east may not be comparable to the experimental reactor we are seeing now! Academician Nie said with emotion first.

"Yeah, our reaction device is a toy compared to this!" A representative from another city in Shuzhong Province agreed.

"According to the agreement reached at the beginning, our country can also send staff to study here? It would be nice if I could come here!" Some people began to think about joining iter.

Mr. Vigo laughed almost in the praises of everyone He looked at these people with admiration and admiration, but waited for his eyes to pass Ma Yang. At that time, the smile suddenly solidified; Ma

Yang's face hung with a hard-to-detect smile, which was not the joyful smile of academician Nie and others who saw a major change in his research field, but ... Some disdainful smile.

If the average person may not even realize the meaning of his smile, who made Mr. Vigo a romantic Frenchman. When he was young, he pushed down countless beauties on the banks of the Seine, and hidden behind those delicate expressions The information is very sensitive!

Hehe, the data he just said is so average compared to Xi and the plan! Suddenly, Ma Yang felt something was wrong and raised his head to just hit Mr. Bigo 's eyes. Oops, would n't he find something wrong? Ma Yang quickly asked, "Mr. Vigo, what is the design goal of iter?"

Chapter 553 - We are leading

Ma Yang 's question disrupted Vigo 's thoughts, and with the support of other delegation members, he put aside his doubts first and turned to introduce iter 's design goals. "According to our goals, wait for iter After it is completed, it will achieve such a goal. Iter will confine hundreds of millions of degrees of high-temperature plasma composed of deuterium and tritium in a magnetic cage with a volume of 837 cubic meters to produce 500,000 kilowatts of fusion power for 500 seconds. "

Mr. Vigo 's tone turned to excitement, and he loudly preached the great significance of this goal, "500,000 kilowatts of thermal power is already equivalent to the level of a small thermal power station. This will be the first time humanity has achieved sustained, A large number of high-temperature plasmas for nuclear fusion reactions produce controlled fusion energy close to the scale of a power station! "

This time Mayan responded very quickly. Before waiting for Vigo 's words to end, he changed his expression of excitement and envy and applauded first, but what he thought was another matter; in the previous experiment In the experimental reactor No. 1 of Suiren, it reached a stable output lasting more than two hundred seconds, and the output power reached half of the design goal of iter; and the design goal of the new reactor under construction far exceeded that of iter. It is expected that the energy output duration will reach 1,200 seconds, and the output power will be much larger than iter.

"Of course, the construction of this project has just begun, and it will take a long time to reach the expected goal!" Iter's construction cycle is expected to be ten years, but according to the current work efficiency, the actual completion time will definitely be longer than this, wait until At that time, Xi and the plan might have been long ago ... Ma Yang hid his pride and showed regretful expression with other delegation members.

"Here I would like to thank the respected Professor Nie and his team members!" Bigo Binbin said politely, "The successful construction and operation of the East provides a lot of effective data for iter. If there is no Professor Nie and his The contribution of colleagues, I am afraid that the construction of iter will continue to extend the time! "

East is the part of the Super Tokamak Reactor so far. The only device that can provide iter with experimental data, its structure and applied technology are exactly the same as the planned iter. Basically, east can be regarded as a quarter of iter; they all adopt a non-circular vertical cross-section design to increase the volume of the reaction body and improve the magnetic field efficiency. At the same time, they also use a liquid helium lossless superconducting system. It saves expensive liquid helium and reduces the cost of equipment operation.

In addition, Hua Guo also provides various conveniences for iter. For example, 70% of the 10% of the share of funds that have been committed is paid by iter parts made by Hua Guo. If this news spreads, I am afraid that those People who preach in the United States and Germany will be scared. how? Will the most advanced scientific research equipment in the world use components made in China? Are they not afraid of equipment explosion? However, the equipment that was transported some time ago has been docked at the port of Marseille, and it has passed the acceptance of iter, and has been given a very high evaluation.

10% of the remaining 30% of the funds are used to offset the staff assigned to iter, and only 20% of the amount needs to be paid. If calculated according to the cost of 5 billion US dollars, China only needs to pay 500 million US dollars. 20% of it, which is 100 million US dollars, can occupy an important position in the iter project with just such a small amount of money. This business is really cost-effective.

When thinking of the process of wandering in various countries that Academician Nie told at the airport, Ma Yang couldn't help but feel happy. If the iter program was launched as early as 1985, what's the matter with China?

To be honest, in the field of controlled nuclear fusion, China is still very lucky. First, Mr. Wang Ganchang and Lu Qiujian were the masters of the theory. Mr. Wang Ganchang's past efforts have made Huaguo not lag behind the West in the basic theoretical work of controllable nuclear fusion, while Lu Qiujian now leads Xi and the planner. The team achieved a theoretical overtaking! Of course, only the core personnel in the project can understand these theoretical research results.

Secondly, the abundant rare earth resources on the Mongolian grassland have allowed the rapid development of superconducting technology and laser technology in China, so that China has not fallen behind the West in these two important areas of controllable nuclear fusion. Some specific

The branch has even feared the number one in the world. With Xi and the plan's huge funding for various cooperative units, it is only a matter of time before these two fields catch up with the West.

At the same time, changes in the international situation and differences in Western countries have also won time for China 's controlled nuclear fusion; Lucia sold the bears 'heritage at a low price after the disintegration of the Red Empire. Let the ht-7 super extension mark device, which has gathered the efforts of countless red empire geniuses, fall into the hands of China, so that the scientists of China can fully and systematically understand the secret of this device.

At the same time, the rash of the iter project delayed the study of controlled nuclear fusion in Western countries for two decades. This won the time for Hua Guo to overtake the curve! Although the Americans have the human and material resources to complete the experiment independently, they did not put the eggs in a basket. On the one hand, it is the interference of oil interest groups; on the other hand, it is said that their shale gas production technology is on the verge of breakthrough, and they have not achieved the urgent requirements of controlled nuclear fusion.

The disunity of the West and the disintegration of the Red Empire can be described as the time. The rich rare earth deposits on the Mongolian grassland can be described as geographically, plus the two generations of theoretical masters of Wang Ganchang and Lu Qiujian and the talented staff around them and the support of the high level of the Chinese government and the cooperation of relevant units across the country can be described as harmonious. Xihe plan is now in harmony with the world, and its future is bound to be very bright!

Although it is known that Xi and the planned reaction device have been ahead of iter, Ma Yang followed the other members of the delegation carefully and carefully observed every detail of the iter device and other supporting systems. He wrote down all the useful places of the plan. With these references, Xi and the plan can take one detour less!

Ma Yang is very clear about the progress of Xi and the plan and the achievements already made. Academician Nie and others are different. The more they look at them, the more worried they are. If the iter can be completed on time, then the West will be far from this field. Leading the country; being in the old man's vigilance against the Western world, he can't be happy anyway, and members of other delegations also express envy and jealous tone from time to time.

Because there were a few flaws before, Ma Yang showed more anxiety than others in the next few days of the visit. This dispelled Bigo's doubts and left a good impression in the hearts of Academician Nie and others.

Chapter 554 - Digging

"Hey, look at this kind of wall material used by others. The latest alloy material is used. According to my understanding, the best wall material in our country is the southwest institute? But even this The efficiency of the wall material developed by the company can only reach 75% of the wall material used by iter, and the cost is higher than that of iter! "Ma Yang expressed his envy not only lyrically, but It is not surprising to be able to come up with detailed data. In Xihe Plan, we have data from various research institutions across the country, and even data from some foreign institutions will be provided by relevant departments on time, so if we talk about the system of the industry, , Ma Yang is undoubtedly the most comprehensive among these people!

"Well, this is indeed the case! Our east accessories are also products of this research institute, but there are always various unsatisfactory places in use!" Academician Nie now looks more like Ma Yang and feels like it, can't help but speak out Support, "I let them improve many times, but it has no effect! Later I asked to know that the backbone of the project they were responsible for was dug to Xi and planned to take charge of the research of rocket accessories! What does this look like Well! Although his research can be related to rocket accessories, is it still more closely related to nuclear fusion after all! "

Hearing academician Nie's complaint, Ma Yang almost couldn't help but laugh. The backbone of what he said is now in charge of the research on the wall material of the new generation of reaction devices in the Xihe project base. As for the rocket accessories, it's just blinding!

Not only the researcher in the southwest, but also the east project team and various other research institutes, there are young technicians with excellent technology and political reliability who have been transferred into Xi and plans under various excuses. So at the beginning of Academician Nie, other people couldn't help but complain, "Engineer Zhou of our institute is an expert in the laser field. The kgyt crystal he developed can greatly enhance the efficacy of the laser transmitter. This is even the people of the United States. There is no mastery of technology! But Xi and plan to dig it out to study the laser detector! It is said that what gravitational wave laser interference observatory is going to be done! "

"Although gravitational wave research is important, human beings may not be able to use these in the past 100 years! And nuclear fusion is an urgent matter! Isn't it clear which country is more important? It proves that gravitational waves may be able to Take a Nobel Prize, and the significance of nuclear fusion is worth a hundred Nobel Prizes! "So someone began to analyze the relationship between long-term and short-term interests.

"You didn't persuade Zhou Gong to stay? That kind of talent wouldn't let it go easily," someone asked immediately. It is rare to have talents with leading technology in the country.

"Who said you didn't stay!" The man who just spoke spread his hand. "But what can we do to keep it? Xihe plans to directly give Zhou Gong an annual salary of 400,000 yuan. He only received more than 100,000 yuan in our institute before; and they can also provide Zhou Gong with his lover's work and children's enrollment. That 's the problem! That 's the middle school attached to the Western Technology University! If I had this opportunity, I would go too! It 's even said more research funding and more advanced research equipment! Our conditions ca n't compete with others! "

Hearing this, Ma Yang was very happy. The same engineer Zhou helped the Tianqin project of Sun Yat-sen University to solve some key problems and then went to Changan Base. The success of the previous two experiments and his Breakthroughs made in laser technology are inseparable.

"There is also Researcher Liu from our institute, which you have seen before, but he is our country 's authority on the plasma! It has also been dug away! It is not Xi and the plan that does not pass. It is a secret department, It is said to be engaged in plasma cannon research! "Speaking of the pain of being digged, it is almost every family! This researcher Liu was a bit sensitive in the direction of the research, so he went around in the recruitment process, and then the military 's name digged him away. In fact, he did n't study any plasma guns, but with Li Long at the base. Engage in plasma research.

"The previous backbones have been dug out, and it is difficult to recruit new people! The young people we were originally optimistic about were intercepted by other departments with high salaries. The only talents left to us were ordinary talents who let them engage in ordinary work. It's okay. I'm afraid I can't hope to make a breakthrough! "Another person lamented," Hey, how do I feel that China has increasingly paid less attention to nuclear fusion research in the past two years? Is it really pinning hope on iter? Above? "

"This is a joint project of several countries! We have a limited say in it. Even if we have any achievements, we may not get much benefit!" Academician Nie said with emotion, "A strategic project like this Does it make sense to place hope on others? "

"It's like having a big plane back then. If it wasn't for the tenth dismount, we still need to send so much money to Boeing every year? I think sooner or later we will suffer from it!"

Although there are no outsiders beside them now, Academician Nie feels that he can no longer continue to discuss these. He beckoned and called Ma Yang, "Pony, come and talk with us!"

"Academician Nie, do you call me?" Ma Yang walked a little puzzledly. Why are you looking for me?

"Pony! What kind of work are you in charge of at your institute?" Academician Nie asked kindly.

"Ah is currently mainly responsible for some assistants. Help the project team solve some theoretical details!" Ma Yang replied vaguely.

"Theoretical research is subject to experimental tests." Academician Nie sighed again. I am afraid that the funds of various domestic research institutes are only enough for theoretical research. In other words, East still has a little more money to test, "Have you never thought of putting your theory into practice?"

This is already in operation? Of course, Ma Yang can't talk about Xi and the experiments before the plan. "These all depend on the leadership's arrangement. If the leader thinks that doing theoretical work is more important, then I will continue to do it!"

"I think it's a pity that you can only do theoretical work with your ability!" Academician Nie is senior and prestigious, and the east project is still one of the few places in the country where there is sufficient funding, so he did not conceal his intentions. In front of everyone, they began to draw together, "Simply you come to the east project! You can say it to the leader, I believe they will not give me this face!"

... Wipe, just now this group of people complained that Xi and He had planned to dig people from them for a long time, and now Academician Nie started to dig Xi and the corner of the plan!

Chapter 555 - Leading and lagging

"Er." Ma Yang is full of black lines, listening to Academician Nie's meaning that he wants to pull himself to the east to be a potential stock, but I am already an assistant of Xihe Planning, then it is necessary to go to you There! This is like I was playing the main role in Real Madrid, but you let me go to the Dortmund youth team, it is absolutely impossible! But now I can't tell him the truth, so I just made an excuse, "Nie Lao, thank you for your kindness, but my girlfriend is a local. We just bought a house in the local area recently and we want to get married. I have to thank you for your kindness! "

"Young people should focus on career!" Academician Nie was a little angry. "It's only a few years since a person's creativity is strong? Isn't it a waste to stay in Shu?"

"Hey, there is no way." Ma Yang now has only one way to go to black, and continues to make up lies. "The new house has already been renovated, and my girlfriend, she and she are pregnant. I really can't leave this time! "

Academician Nie not only frowned, but for an old-schooler like him, unmarried first pregnancy was not a good thing, but Ma Yang 's professional qualities really made him a little difficult to give up, so he made the final effort, from the pocket I took out a business card and handed it over, "I will not force it, but remember to call me when you want to change the environment in the future. Our east project welcomes you to join us at any time!"

The representatives of other research institutes looked at the business card delivered by Academician Nie. The envious eyes were red. Working under such an authority, and having such good research conditions as the east project team, how could you not find such a good thing? On my head! How could this kid not grasp well! They now can't wait to agree with Ma Yang. Of course, it would be better if Academician Nie was interested in himself.

"Thank you Nie Lao, if I want to change my job, I will definitely call you!" Ma Yang said respectfully. He still respects such an old scientist who cherishes talents. But it's just respect, he knew he probably wouldn't have time to go to east.

The visit and exchange continued for a few more days, and the staff of iter proudly showed their proud achievements. The greedy words of the other delegation members were almost coming out, but Ma Yang, although on the surface, was like a project. However, the insider didn't take this seriously, and most of the results iter produced were inferior to Xihe plan. Xihe plan's leadership in Professor Lu has achieved rapid development in a short period of time. On the basis of China 's already very good research, it has achieved overtaking in the West in corners. These things of iter ca n't even match that of Flint One, let alone the second-generation reaction device that is currently under construction.

Moreover, iter's construction period is as long as ten years. After ten years, Xi and the plan can develop into what Ma Yang can't imagine. Thinking of this, he couldn't help but bend his mouth slightly. [\times] It would be fun if iter just happened to catch up with Xi and plan to make an official appearance! Isn't the highest technology jointly developed by the world's major scientific and technological powers found that they have fallen far behind just after they were born?

If Lv Qiujian sees this scene now, he may be able to see pictures of the two generations of deputy privy ambassadors visiting the Mi * team before and after Hua Guo. Like Nie Lao, they leaned forward and looked at Mi Jun's high-tech equipment with envious eyes. How long will it take us to catch up! And when the deputy privy ambassador was visiting the Mi * team in the back, he was

standing with his chest in his arms and slanted his eyes at the guy brought out by the Americans. Cut, what is this! Not as good as what we equipped!

After a week. The visit and exchange finally came to an end. The group left Cadarache reluctantly and went to Marseille to prepare to fly back to China.

It was different from the lively scene when I came. On the way back, everyone was obviously much quieter, all looking worried; as staff members of the nuclear fusion research in China, they deeply experienced the gap between their research and iter, which is not something for China Good news! Moreover, this situation does not seem to have attracted the attention of the Chinese government. Not only did it not add budgets to the various research institutes, it also frequently transferred technical backbones from them! If we go on like this, the research on controlled nuclear fusion accumulated by China for many years will be destroyed once!

Academician Nie has made up his mind, and he must respond to it after returning home! Hua Guo must never put research on controlled nuclear fusion on iter! We must have our own independent research!

Compared with them, Ma Yang's mood is equally complex. On the one hand, he is very pleased to see iter lag behind Xi and plan, which shows that his team has become the world's most advanced controllable fusion fusion team. Although he has not visited the National Ignition Device of the United States, it is unlikely that he will far exceed iter wherever he wants to come.

But on the other hand, he had some regrets. During these few days of visiting, he did not find much controllable Xi and plans to learn from, the mission of this trip is equal to only half done! Knowledge of iter is sufficient, but absorbing the advantages from them is not very rewarding for the task of Xi and planned follow-up research. Compared with the former, this latter one is more concerned about him.

So the psychology of everyone on the plane went to two extremes. Academician Nie and others expressed emotion in their hearts. Hey, iter is simply too powerful and too advanced. When will we catch up with them!

Ma Yang also sighed in his heart, hey, iter is really too weak and too backward, it can hardly serve as a reference for Xi and the plan! I basically wasted my time this time!

Back to Beijing declined the invitation of Academician Nie to visit east, Ma Yang couldn't take the rest, and went directly to the plane ticket back to Chang'an. The gains and losses of this visit pondered how to report to Lu Qiujian.

By the time he returned to the base, it was already midnight, and Ma Yang made the final changes to his report before he climbed and started to see jet lag.

Early the next morning, he came to Lu Qiujian's office, preparing to report, "Professor Lu, I am back from Kadarashe!"

"It's hard work! Wait a moment, I'll call Li Yan and they will listen to everyone!" Lv Qiujian picked up the internal phone on the table. After a while, this office was full of people. They were curious. Mood is ready to listen to Ma Yang's report.

Chapter 556 - Q & A

"It's all here, Ma Yang, you can start talking!" Lu Qiujian glanced, changed a comfortable sitting posture, and gave Ma Yang the right to speak.

"Professor Lu, Gong Li, colleagues, I will first report to you the gains from this visit to iter!" Ma Yang walked to the whiteboard and picked up the oily water pen to start to sketch the overall structure of iter. This is a design method. The core part is a high-temperature deuterium-tritium plasma ring. Its specific data is that the periphery is a ring-shaped superconducting magnet that costs \$ 1.2 billion. The fusion method they adopt is "

"This fusion method still adopts the traditional method, following the theory put forward by Wang Lao!" Li Yan touched his chin and commented, "Their equipment is indeed much more advanced than other research institutions in China, but and There is still a gap between us. "

"Well, as far as the treatment of plasma is concerned, our method is more efficient, more plasma is delivered at one time, and less residue is generated!" Li Long echoed, a tone of pride in his tone, In this respect, although Lü Qiujian's theory is mainly used, he also has many achievements.

"The movement of those robotic arms is quite different from ours. Although the overall performance is not as good as ours, there are a few details that we can learn from!" Yu Lanxiang, head of the research department of the automated robotic arm, interjected. "Pony! Is there any more detailed information about this?"

"Iter's construction has not been completed, but I have seen their design drawings, although lack of details, but I think we can also analyze something from it!" Ma Yang flipped through the notebook to find out that he was based on memory The drawings were handed over, "Can you see if it will come in handy?"

"Let's see!" Yu Lanxiang frowned as he took Ma Yang's notebook. "I said Pony, your drawing technique is weak enough! Thanks to me, you might not understand what you are drawing!"

"That's it. If you weren't you, I wouldn't dare to take this thing out! You are a **** who can cook with an automatic robotic arm!" Ma Yang flattered Yu Lanxiang with a grinning smile. At the exchange meeting, they showed a Mapo tofu with a mechanical arm in front of their global counterparts. Let the representatives of the powerful automatic machinery such as Neon and the United States fall into the eye, leaving a large area of psychological shadow, so even a sketch he can figure out many ways!

"I understand." Yu Lanxiang really deserved his reputation. After a quick glance, he understood the doorway of the iter robot arm. He pointed to a joint of the robot arm and said, "Although you have not drawn the internal structure, but according to the shell I guess they probably added an axis here to allow the robotic arm to make 13 more movements! This design is a bit interesting. [\times] I go back and think about how I can use it on our equipment! "

"I will copy a few large pictures for you in a while, and then I can still remember other details!" Seeing that he can help other departments, Ma Yang was very pleased, took the notebook and continued to talk, "Then the laser transmitter, Iter's laser transmitter looks like this "

"What color is the emission port of their laser transmitter? What is the caliber? Have you ever seen them launch?" Zhou engineer, who was repeatedly mentioned in Kadarashe, asked a series of questions.

"It should be ruby red. The caliber probably hasn't been seen before the launch, but where did I see the photos of the test they had done before, on the photo?" Ma Yang closed his eyes and replied while answering engineer Zhou's question.

"It's a bit interesting, according to my guess. They should use this crystal!" Engineer Zhou wrote the code name of this crystal on the whiteboard. "I also considered using this crystal as part of our laser transmitter. , But later considered other issues. I chose another solution; but from the test situation that Xiaoma said just now, the effect of this kind of alarm crystal is a bit beyond my expectation! Well, after going back, I was in Try a few more times to see if we can further our laser transmitter! Pony, your information is very useful! "

"According to the information disclosed by iter's Mr. Ronald Vigo, the material of their superconducting coil is the advantage of this material."

"Have you ever seen a cross section of such a superconducting coil? What physical characteristics does its cross section present? Do you have relevant data?"

"Its interface is silver-gray, reflecting a variety of colors in the sun. According to Mr. Vigo's introduction," Ma Yang kept asking questions and Ma Yang kept answering. This super-powerful brain activity made him feel for a while Tired! There are some problems in it that he had already thought of and made detailed records in the book. For others, he didn't think about it, and he could only answer by his memories. But he knew that people's memories would gradually weaken over time, so he insisted on; after finishing all the information he had learned. He was so sweaty that he couldn't stand.

"Xiao Wei, quickly take the pony to check the body!" Lv Qiujian quickly greeted Wei Yunyue to come over and send Ma Yang to the medical room. "You have worked hard during this time, take a good rest for two days, and wait for your body to recover Start working again! "

"Sorry The news you have heard is very valuable for us, so we can't help but ask!" Yu Lanxiang saw Ma Yang's pale face and said sorry, but If he comes again, I am afraid he still can't help but ask? After all, this information is indeed very useful.

"I will make a copy of the sketch and give it to you in a moment. If you think of other problems in the past two days, you can also go to the infirmary to find me!" Ma Yang squeezed a smile, seeing the information he brought back can play Role, he was quite pleased.

Lu Qiujian also smiled aside, Xi and planning such a big project can't be completed by relying solely on his ability! It is with such talents as Ma Yang, Li Yan, Li Long, Yu Lanxiang, Zhou Engineer, etc. that China has accumulated for so many years that the project can develop by leaps and bounds. It is really a blessing to have such a partner!

"It's not too much of a problem, it's a bit of over-use! It's good to rest for two days!" Wei Yunyue briefly checked Ma Yang and took him away.

"Okay, let's discuss another question now!" Lu Qiujian got up and walked to the whiteboard and said.

Chapter 557 - Expand cooperation

"Pony just mentioned a problem! It is that China now has many other controlled nuclear fusion research institutions, although these institutions have been drawn by us a lot of backbone!"

Speaking of this, many people present Laughing, for example, Engineer Zhou and others were dug

into Xi and the plan from these units, "But they still have quite good research capabilities, but are constrained by funding and talents for many reasons. Their current situation It 's not so good! If people continue to develop like this, these institutes will probably gradually decline! In this case, it is really a waste of their background and foundation! "

"Yes! The laser technology research we are in is still pretty good! I also went back to see it when I returned home for the New Year!" Engineer Zhou nodded. "Since I left, their funding application has also been cut. Less! Many of my old colleagues have some very good ideas that ca n't be verified by experiments! "Engineer Zhou also regrets them. Although these people still have a gap in their ability to suit them, they are not useless. They have the right conditions, and they can also produce good results.

"The same is true of us! Many projects whose theoretical work has been done in place have to be discontinued due to funding constraints!" Someone immediately echoed. $[\times]$

"So I think, how can we make use of the resources of these research units?" Lu Qiujian said slowly, "If the utilization is good, it will be of great benefit to our research!"

"Our own funds are still very tight, I am afraid that we can't spend money to support them! And Xihe plan is a space exploration program on the bright side. If you directly assist them, will other countries guess our trueness? Intent? "Li Yan raised a very critical question.

"There is indeed such a possibility!" Lu Qiujian also thought of this, "but we can't do nothing for this reason!"

"I don't think it would be appropriate to provide comprehensive assistance. The research scope of these research units is very wide. And the level is different. If you sprinkle a handful of pepper noodles, I am afraid it will have no effect!" Engineer Zhou is very concerned about this issue. Have a say. "Like our laser technology is in a leading position in the country, superconductivity and permanent magnets are not as good as other research. If the funds are evenly distributed, the efficiency is too low!"

"Well, so I think that these institutes should be adjusted and merged to make their strengths stronger, and the weak departments will be adjusted to other units! As far as you are concerned, I think that assistance to the laser department alone Enough! They can also help you with your research! The original unit of Yu Gong can focus on the research of the robotic arm, and the others can be put first! Change the comprehensive research unit to a special research unit. You can maximize their strengths! "Lv Qiujian said his solution. He had thought about this at the beginning of the Xihe plan, but the actual situation at that time was not suitable. It was only when Xihe plan

had already made major achievements that he took this opportunity to ask, "As for the issue of confidentiality, We can use the east project as a cover. Academicians Shangyang and Liang Wenchao did not work in east before? He can come forward to coordinate this issue! "

Academician Shangyang and Academician Liang Wenchao accompanied Lu Qiujian to preside over the recruitment fair. They are the few people in the older generation who know the true purpose of Xi and the plan, and their qualifications in the field of nuclear fusion in China are deeper than that of Academician Nie. Qualified and capable of carrying out this plan. In the future, if those research all the results, Xi and plan can also be used directly. It is equivalent to expanding the cooperative units of Xi and the project again under the name of the east project.

"We can also use the academicians Shangyang and Liang Wenchao to inform the research institutes of our current breakthroughs after screening. Let them assist us in doing some less sensitive basic work! In this way, the base headquarters can take more experience Focusing on the core research! "Engineer Zhou added, he felt that many of the work in the laser transmitter department could be done quite well by his previous unit.

"It is indeed the case. In the research of plasma, the team led by my former teacher is also very strong. I think he can help us share some work!" Li Long nodded.

Then everyone had a heated discussion on how to carry out cooperation. Lu Qiujian saw everyone's enthusiasm very high, so invited Academician Shangyang and Academician Liang Wenchao to fly to Chang'an from other cities to join the discussion.

These two have a more thorough understanding of the various nuclear fusion research units across the country. They were also very interested after listening to the proposals of Lu Qiujian and others, and helped them improve the details of the framework of the plan. Then he happily took these materials and went to the capital to find Qin Feng report!

It didn't take long for Qin Feng to support this plan. Immediately, Academician Shangyang and Academician Liang Wenchao carried out research work across the country, and Lu Qiujian also sent several assistants to assist them. Soon, various nuclear fusion research units in China began adjustment work under the auspices of two academicians.

Although the adjusted research units do not have the breadth of the previous multi-field research, but the research depth of some individual items has been strengthened many units have become the best in the country in this field; Afterwards, the two academicians also found research funds and research tasks for them. These researchers, like Jiuhanfengganlin, joined the new research work with full passion.

The research progress of Xihe Project also benefited from the cooperation of these units, which further increased the speed. According to the current situation, it may be possible to carry out the experimental work of the second-generation reaction device by the end of this year!

While the two academicians were busy helping these nuclear fusion research units to make rectifications, Lu Qiujian packed his bags and prepared to go to the satellite launch base in northwestern China. In his words, it would be necessary to complete a full set of dramas. Xi and the plan In the space exploration plan, I also need to show my face and brush my presence on occasions such as satellite launching and telescope construction, so as not to cause people to doubt my identity as the chief of the plan.

He visited the launch of the Shenzhou spacecraft last year. The purpose of this time is to visit the launch of a moon exploration satellite in China. Of course, he did not visit it empty-handed. He also brought gifts to the space department. .

Chapter 558 - Girl watching the stars

Huaguo, Jinling, and Purple Mountain Observatory, Qi Yunxing, a senior student of Jinling University's Astronomy Department, was carefully studying the pictures taken by the telescope.

Perhaps because of the star in the name, Qi Yunxing has loved the stars since she was a child. Every time she returns to the countryside, Gary and grandpa Gary every summer vacation, she always likes to lie on the flat concrete roof of the roof in the clear night sky and observe for a long time The stars in the sky are recognized one by one according to the knowledge I have seen from the book. The seven stars on the north side of the sky are the seven stars of the Big Dipper, which is really like a spoon as written in the book; the three on the east are triangular The brightest of the stars is the Vega. Compared with the Vega, the Cowherd seems to be much dimmer.

Every time she watched the stars on the roof and saw that she was asleep, the grandparents said it did n't work. The two old men had to wait for him to fall asleep before carefully taking her back to the house.

When she was in elementary school, her father rewarded her with the final version of the children 's edition of "100,000 Whys" that she bought for her at the first grade of the year, which made her like a treasure. All the parts related to the stars were almost turned over by her; Her vision has also shifted from those stars that can be observed with the naked eye to a deeper universe.

It turns out that the light emitted by those stars will take a long time to reach the earth. It turns out that there is no Chang'e Jade Rabbit or Wu Ganggui on the moon, and there are only countless craters and Armstrong's footprints; the distance between the original Cowherd and the Weaver So

far away, even if the couple is moving at the speed of light, it will take 8.2 years to see each other. This distance is not enough to connect all the birds in the history of the earth! I don't know how the magpies could make them meet once a year.

Qi Yunxing grew up slowly, and when she went to middle school, grandpa and grandma were getting older and could not hold her anymore, but his preference for stars had not changed, but at this time she used to observe the stars. Then the naked eye, but the astronomical telescope that I have worked hard to save for many years of New Year's money.

When she first saw the Moon Crater on the roof of her grandparents 'house, she did n't feel sad because of her childhood fantasy, but rather indulged in the Crater that looked ugly to others.

When girls of the same age were passionate about idol dramas, concerts, celebrities, and began to blush and quietly talk about the boy in school who was the most handsome, Qi Yunxing never participated in this discussion; every holiday, these little girls or on the Internet Searching for the latest developments of their idols, or avoiding parents' anxiety and starting their first date; Qi Yunxing is either carrying a astronomical telescope that is a bit heavy for her, looking for a better observation place, or soaking I looked at the books of the sky all day long in the library management, or came to the observatory to stare at the huge telescopes and the magnificent star charts for her.

Fortunately, her academic performance has been very good, neither the teacher nor the parents have interfered with her hobby; until the end of the college entrance examination to apply for college! According to her achievements, both Beijing Normal University and Mizuki University can easily win, but she chose Jinling University.

Every time someone asks why she gave up these two schools that all Chinese students yearn for, Qi Yunxing always replied in a natural tone, "Because Jinling University's sky is the first in the country!"

Although the day of Jinling University is the first in the country, not all the students who come in are full of enthusiasm for the day. Most of them are assigned to this major; when they first entered the school, the entire dormitory complained of their bad luck. I plan to prepare for the entrance examination from the beginning of my freshman year, and I must be admitted to a major such as finance in the future. Only Qi Yunxing smiled and said nothing, in her view, there is nothing more beautiful than the stars in the world!

Qi Yunxing is a girl with outstanding appearance, plus a good figure from a small place to look for a stargazing place to exercise, so as soon as she entered Jinling University, it triggered the pursuit of

countless boys. Whether it was sending flowers, reading love poems, or showing her outstanding sports talents in front of her, she never moved.

Only one time when a boy was holding a guitar and playing downstairs in her dormitory, she held her chin for a long time because the boy played "Stary-stary-night" by Don McLean The starry sky portrayed in Van Gogh's pen has made her intoxicated for a long time.

There are also many generous students who attentively send Hermes, lv and other luxury goods that girls can't resist. She also doesn't look at it. When she is joking with her girlfriends, she smiled and said, hey, if he sends It 's just that the astronomical telescope might have been a long time ago!

Girlfriends are suddenly covered with black lines, so there are lovers who send astronomical telescopes! Besides, even if it is given to you, you will probably throw him to the side and run away to see the stars with the telescope?

So until now Qi Yunxing has not started to fall in love, but she has no regrets. For her, as long as there are stars to watch, she is satisfied.

So, nearing graduation, when other students were busy looking for work and preparing for the postgraduate examination, she submitted an internship application to the Purple Mountain Observatory. With her perfect grades and extensive knowledge of the stars, she successfully obtained this opportunity To gain access to the Purple Mountain Observatory and use the more powerful astronomical telescope to observe the stars.

Stand up and move your hands and feet, twist your already sore neck, walk to the balcony to breathe in the fresh air, look up at the familiar old friends in the night sky, rest for a while, Qi Yunxing went back to the house and looked at these Photographs taken.

The little stars in the photos are completely confusing to others, but Qi Yunxing is no longer familiar with these familiar ones, and she quickly finds interesting things in these photos.

Hey, this asteroid seems to have never been found in the star charts I looked at before! Although observing the starry sky for many years, such a lucky thing as a new asteroid has never come to her head, Qi Yunxing also regrets it; now it seems that the opportunity appeared in front of her, Qi Yunxing suddenly excited.

She carefully checked the data of the position, size and brightness of the stars on the photo, then opened the computer swiftly, logged on the relevant website, and started the hard search and verification work! Is it the birth of the first asteroid discovered in my life?

Chapter 559 - Send you a star

After a long search, Qi Yunxing finally determined that the asteroid she found was a new asteroid that was not recorded in the star map, so she immediately happily held the photo and the information she found and knocked on the Purple Mountain Observatory for internship. Researcher Zhao 's office door.

"Xiao Qi! What's so happy?" Since this young girl with outstanding professional quality and full of enthusiasm for astronomical work arrived at the Purple Mountain Observatory, she quickly won the love of many staff members. Then again, who is such a girl? Will you like it again? Researcher Zhao has already planned, and after she graduated, she asked her superiors to enter her into the Purple Mountain Observatory, so she is now very enthusiastic.

"Teacher Zhao, look at this!" Qi Yunxing walked to Researcher Zhao, put the photos and materials on his desk, and pointed his finger at the asteroid. "This is the result I observed last night. After verification, I think This asteroid should be discovered by humans for the first time! "

"Oh? Let me take a good look!" The Purple Mountain Observatory discovered new asteroids as early as the 1960s, and has achieved this achievement many times since. More than 400 asteroids have been discovered so far., But those are mostly the achievements of old researchers. It is the first time for Qi Yunxing to come to the Observatory for an internship and discover something new. Researcher Zhao said with a smile while receiving the information, "Xiao Qi, I am in Taiwan I have n't encountered such a good thing after working here for so long. I did n't expect you to be met in just a few days!"

"That's different, your job is not to discover asteroids! I'm just lucky this time!" Qi Yunxing said obediently.

"Luck also has the strength to do the background. I believe that some people may have observed this asteroid earlier than you, but it is not easy to find that this asteroid has not been entered in the star map!" This requires a considerable professional Knowledge, can ordinary people find clues on this black paper covered with sesame seeds?

After watching it for a while, Researcher Zhao initially confirmed that this asteroid was indeed discovered for the first time, so he immediately stood up and sorted out the information brought by Qi Yunxing three times, "Go, follow me to find Researcher Qu, he is The staff responsible for submitting a new asteroid review to the International Asteroid Center and the Asteroid

Nomenclature Committee, if you get his approval, your achievement is considered to be implemented! "

"The asteroid I observed last night orbited the sun in a period of 3.44 years, with a solar speed of 21.2 km/s, the longest distance from the earth is 548 million kilometers, the most recent 133 million kilometers, and an average distance of 330 million kilometers from the sun The time was February 20, 2009, using the Schmidt-type near-Earth telescope of our observatory. "Qi Yunxing reported a series of numbers to Researcher Qu without looking at the data.

Among the 62 observatories in the world, the number of asteroids discovered by the Purple Mountain Observatory is the fourth in the world, so Researcher Qu often handles similar tasks. He verified the time faster than the two of them imagined, "Well, I checked, This asteroid was indeed discovered for the first time, although it still needs to be observed in at least 4 regressions, and the orbit will be officially determined after the orbit is accurately determined, but these are only a matter of time; I will immediately report The International Asteroid Center and the Asteroid Nomenclature Committee, headquartered at Harvard University, submitted for review; in accordance with international practice, Xiao Qi, you can suggest a name for this asteroid! "

According to the provisions of the International Astronomical Union, the naming of asteroids generally consists of two parts. The first part is the permanent number of the asteroid, such as the ctype asteroid 277, etc.; the latter part is where the discoverer obtains the name for him. It can be a person's name, such as Shen Kuoxing, Guo Shoujing, Yang Zhenning, Zhou Jielun, Lin Qingxia, etc., or a place name, such as Jingcheng star, Tubo star, Zijinshan star, etc., and can also be named after the unit, such as Jinling University star, Star of Chinese Academy of Sciences, Star of Natural Science Foundation, etc.

Before the naming, there will be a temporary number, which is composed of its discovery year and two letters, such as 2004dw; according to this rule, the temporary number of the asteroid discovered by Qi Yunxing should start with 2009; wait for this When the precise orbit of the asteroid is calculated, he can obtain an official number.

Since the discovery of the first asteroid in 1801, humans were first named using characters from Roman and Greek mythology. For example, the first asteroid was named Ceres, followed by Wisdom and Righteous Stars. Wait.

But as time went on, one asteroid after another was discovered, and the heavenly families gradually discovered that the names of people in ancient Roman and Greek mythology were not enough; so they adopted a more free naming method, such as the discoverer can Naming an asteroid with the name of his wife is of course an extremely romantic method. Unfortunately, there are too few lucky people who can use this method; the names of historical or other important people, cities, fairy tale

characters or Gods in other myths are named, so Einstein star, Cleopatra star and many other names were born in the future But it is not just a person name, event or unit name can be used to name For example, political and military figures or events must be named one hundred years after the death of the figure or the event, so we can now name the stars Qi Jiguang and Lin Zexu, but they are not allowed to be named Taizuxing, Hua Guo Jianguo Star and so on.

At the same time, under normal circumstances, the naming of asteroids should also try to avoid commercial elements. Applications such as Bill Gates and Google Star were not approved by the asteroid naming committee.

Qi Yunxing had known this for a long time. She had been busy all night to verify the information. She hadn't had time to consider the naming. "I want to name it Jinling University Star, but does this name seem to be there?"

"Well, Jinling University has cultivated many astronomical talents, so during the centennial celebration in 2002, someone named the asteroid with the number 3901 as Jinling University Star as a gift for the alma mater's centennial celebration!" Researcher Qu is also from Jinling University. Remember this very clearly.

Qi Yunxing frowned and continued to think, but in a short period of time there would be a good name. Her eyes drifted around the office, trying to find inspiration for the name; from the window to see the decoration on the wall, and then to Researcher Qu On her desk, when she saw the front page of the newspaper on Researcher Qu 's desk, she finally found inspiration, "Just call it Lu Qiu Jianxing!"

Chapter 560 - Asteroid Foundation

"Huh? Why did you choose this name? It doesn't seem like a little girl should make a choice!" Researcher Qu was a little curious, and named the asteroid after the scientist. There have been many occurrences in the history of the Purple Mountain Observatory. In 1990, an asteroid discovered in 1965 was named Wu Jianxiong, but those names were too serious. If the leader of the observatory did this song, it is not surprising that a young girl like Qi Yunxing should not use herself. Does the idol name name the asteroid?

For example, an asteroid discovered by four astronomy enthusiasts on both sides of the Taiwan Strait at the Lulin Observatory in Yushan National Park in Baodao, numbered 257248, they named it after their favorite singer Jay Chou; Researcher Qu thought that Qi Yunxing might Like these four young people, she will be named after her favorite singer or movie star. Unexpectedly, she came up with Lu Qiujian's name.

"Is there anything wrong?" Qi Yunxing blinked and blinked, replied in a natural tone, "The sky can not do without the support of mathematics, and the most helpful to me in mathematics learning is the" Learning Mathematics with Lu Qiujian on TV " "The show! I also liked his book" When Humans Start to Look Up at the Starry Sky ", so I just saw the newspaper on your table and thought that it would be better to simply name this asteroid after Professor Lu!"

It turns out that the girl in front of her is not without idols, but her idol is not a singer or movie star like girls, but Lu Qiujian as a scientist! "Okay, then that's the decision. I will use the name of Professor Lu Qiujian to submit a declaration to the International Asteroid Center and Asteroid Nomenclature Committee."

Researcher Qu and Researcher Zhao are very satisfied with the decision to align with Yunxing, because Lu Qiujian is a very hot figure. If you inform the media of this news, the Purple Mountain Observatory will quickly expand its influence. It is very good for this unit, so after finishing the application, Qu Researcher said to Yunxing, "Xiao Qi, you are going to prepare. I will notify several media to let them interview you later."

"Ah? Do I have to be interviewed?" Qi Yunxing didn't want to go, but the media interview was time-consuming. It might be better to see a few photos taken by the Schmidt-type near-Earth telescope.

"Xiao Qi, what do you think is the most important thing for an observatory?" Researcher Qu probably guessed Qi Yunxing's idea, he asked directly.

"A suitable star-gazing location? A pollution-free sky? Advanced observation equipment? Professional astronomical staff?" Qi Yunxing blurted out, a suitable star-gazing location could observe a wider starry sky, and the night sky without atmospheric pollution and light pollution could be observed For even weaker stars, advanced observation equipment and professional personnel need not be said, these are the basic conditions that an excellent observatory should have.

"You are not right! Address, weather, equipment and personnel are important, but all of them need a foundation!" Researcher Qu paused before continuing. "That's enough money, how can we get there without money?" Looking for a suitable stargazing location? Most of the pollution-free locations are in undeveloped areas. The cost of building an observatory in these places is not low, and advanced equipment needs to be purchased and customized with a lot of money! Similarly, we also Do n't let the staff work hungry! It 's okay to provide them with a salary that will satisfy their lives!"

"But what does this have to do with my interview?" Qi Yunxing still couldn't figure it out!

"Because the discovery of asteroids is a mysterious thing for ordinary people, if it is published by the media, it will definitely attract the attention of many people!" Especially the asteroid is a beautiful little girl like you, Coupled with the influence of Professor Lu Qiujian, it will soon become a hot news!

"Xiao Qi, don't you know that our observatory also has an asteroid foundation?" Researcher Zhao explained to help, "The asteroid foundation's main work is to carry out asteroid naming, accept donations, near-Earth object detection and planetary science research, etc. Activity; it attracts many donations from astronomy enthusiasts every year and provides a lot of funding for asteroid research! If you are interviewed, more people will know the Asteroid Foundation, thus attracting more donations! You also It is always good to know that our observatory does not have a lot of funds every year. It is always good to get more funds for the observatory! "

There are many people who want to have the naming rights of an asteroid, but few of them can be lucky enough to find an asteroid. Although there are many companies that have launched the asteroid naming rights transfer service, those are commercial activities. , Not recognized by the International Asteroid Center and the Asteroid Nomenclature Committee, so donating to professional institutions such as the Purple Mountain Observatory became the best choice; there are many asteroids discovered by these units every year, as long as enough are smashed out Money, then you can name a certain asteroid.

For this reason After the establishment, the Asteroid Foundation won many donations, but it is still not enough for the research work of the Purple Mountain Observatory! So the two researchers wanted to use this opportunity to strike the reputation of the Asteroid Foundation and attract more donations to the Foundation.

"I get it!" Qi Yunxing nodded. "Then do as you say! But I will say something deeper to those reporters when the time comes?" She understood that only when the observatory became better and better could she observe the stars better. So even if there was some resistance, she agreed.

"It's very simple, you just need to tell the reporters about the process of discovering the asteroid and the reason for naming it! Of course, the most important thing is to tell them about the Asteroid Foundation!" Researcher Qu looked at his watch. "Now It's not too early, let's go and talk while eating! I will tell you how to deal with the media! When this matter is over, I will apply to the superior to give you more time to use the telescope! "Researcher Qu Knowing the way of employing people well, he also threw a sweet date while giving the task.

This condition conquered Qi Yunxing in an instant. She braved the stars and began to imagine how to make good use of the newly increased observation time!

It 's not a big news to discover a new asteroid, but it 's different if the discoverer is a beauty, and even better is that the asteroid is named after Lu Qiujian. After receiving the news, many reporters immediately Go to the Purple Mountain Observatory, ready to interview Yunxing!