Scholar 191

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He would not be depressed if he did not understand something.

However, if his research did not seem to have an end, it would make him feel irritated.

Yes, this was his psychological makeup.

Even a Nobel Prize winner could not convince him of anything he did not understand.

This was unlike mathematics. Mathematics was binary and there was only a right or wrong answer.

What irritated Lu Zhou was that theoretical physics was different. Once could be both wrong and right at the same time, but just on different levels.

The development of the theory was far different from the experiment. Theories of impossible experiments had been developed.

The "standard model" that theoretical physics so heavily relied on was "unreliable".

In the 1960s, the supersymmetric theory proposed the string theory which later emerged in the 1980s. However, over the past few years, weird particles were found in the laboratory. The theoretical physics community hurriedly announced the entry into the "post-standard model" era, and within two years, the neutrino oscillation brought the standard model back.

Lu Zhou could understand why Mr. Frank was so obsessed with supersymmetry.

This persistence was definitely not because of something superficial, but because the supersymmetry theory was not established. The loopholes of the standard model could not be filled, and the string theory based on supersymmetry theory would also collapse.

If the supersymmetry theory was proven wrong, then people would ask why the theoretical physicists wasted half a century of time working on the standard model.
If only theoretical physics worked like the news
One could discover this today and overthrew it tomorrow. Every day would be a new page.
In reality, theoretical physicists had to be rigor and clear. They could not just constantly changed their theories.
Lu Zhou did not know if his dark matter speculation was correct.
Both theories had the possibility of being established. However, the theories were wildly different. Lu Zhou wished he had the evidence to refute Frank's theory, but unfortunately, he did not.
He had to wait for the results of the experiment.
Lu Zhou hesitated for a moment before typing a line of words.
He then clicked "Send".
[Maybe you're correct, but I'm still inclined to believe in my theory.]
On the other side of the Pacific Ocean, Professor Frank was sitting in the front seat when he suddenly laughed out loud. His action scared the PhD student that was driving.
The PhD student glanced at the computer and asked, "What?"
"Nothing," answered Frank as he shook his head. He then closed his laptop before smiling and said, "That Chinese boy I told you about is quite funny."

Lu Zhou did not feel so good.
He stared at the computer for a long time. He then looked at the stack of A4 papers on his desk before scratching his head irritably.
Two-line operations seemed to be the wrong choice. One was number theory, the other was functional analysis and group theory. Both were big problems.
This most uncomfortable thing was that Mr. Frank introduced an extra dimension operation outside the symmetry field. This really was not mathematically sophisticated. From Lu Zhou's perspective, solving this problem with the perspective of dark matter would avoid many mathematical problems.
From the perspective of dark matter, every Z/PZ generator could be mapped to a function such as exp(2pi·i/p), and the Pontryagin duality problem could probably be solved.
The mathematicians in him told him that this was very probable.
Lu Zhou leaned back into his chair and stared at the ceiling. The mathematics symbols kept appearing in his brain to the point that he totally forgot to eat.
Group theory
Group theory
If only group theory is as simple as number theory Although number theory isn't exactly simple
Wait, group theory?!

Lu Zhou's eyes lit up and suddenly his mind flashed with information.

He was not thinking about the 750 GeV characteristic peak, but rather he was thinking about the Polignac's conjecture.

He sat up abruptly from his chair and picked up a pen. At the moment, Lu Zhou's brain was spinning a million miles per second.

Group theory was a very powerful tool. Not only was it listed as the two theoretical artifacts of quantum mechanics in the Hilbert space in functional analysis, but it was also useful when dealing with infinite prime numbers.

For example, any number theory teacher would teach about Fermat's theorem.

This theorem had many methods of proof. The most succinct proof was by group theory.

This proof only needed three lines.

If α and p were primes, the Euler's theorem was $\alpha^{\varphi}(p)\equiv 1 \pmod{p}$, but $\varphi(p)=p-1$, so $\alpha^{(p-1)}\equiv 1 \pmod{p}$. Both sides would then multiply by α to get the conclusion: when α was a natural number and p was a prime number, there was $\alpha^p\equiv\alpha \pmod{p}$.

Was it that difficult?

In fact, Fermat's theorem was only a special case of Euler's theorem.

On the other hand, Euler's theorem could also be solved by group theory. However, it took half a page.

During this time, Lu Zhou was thinking of how to solve the Polignac's conjecture with a topology method. He had not even considered other mathematical methods.

	fact, many theses on arXiv had been trying to solve the Polignac's conjecture with his topology ethod.
Но	wever, Lu Zhou did not realize that physics would inspire him.
Th	is was unexpected.
Lu	Zhou started to spin the pen in his hand and he suddenly slapped the table.
Не	sighed and spoke with emotion.
"TI	nis idea might work!"
Wł	nen the inspiration comes, it's like a tsunami. You can't stop it!
	Zhou placed the 750 GeV issue aside and pulled out a brand new A4 paper.
Tin	ne slowly passed by, but he did not stop writing.
Th	is felt different than the last time.
Las	st time his inspiration was given. This time, his inspiration was created by himself.
Th	e pen moved swiftly on the paper.
Wi	thout him realizing it, he had already written five draft papers.
Lu	Zhou rubbed his stomach and leaned against his chair before he took out his phone.

He was shocked when he looked at the time.
"F*ck, it's already five o'clock!"
He had not even eaten his breakfast yet.
Lu Zhou could not handle it anymore. He then went to the crowded cafeteria and ate some dinner. After dinner, he continued to work.
It was at six o'clock in the evening when Shi Shang returned from his class with his food. When he saw Lu Zhou writing on the desk, he asked, "Zhou, what are you doing? Master's students have homework too?"
Lu Zhou was at a crucial point, so he did not raise his head when he replied, "Writing a thesis."
Suddenly, Huang Guangming and Liu Rui also came back with their food.
Liu Rui placed his backpack on the table and took out his homework while Huang Guangming walked over to Lu Zhou and looked at the paper curiously.
He was muddled when he saw what Lu Zhou was writing.
"F*ck, Zhou, I don't understand a single word you wrote."
Out of curiosity, Shi Shang also came over.
"Guangming, we're third-year students already, so you should at least be able to understand the symbols F*ck, this is group theory Advanced stuff!"

Liu Rui was writing his homework when he twirled his pen and said calmly, "It's not that advanced, I think some fourth-year students take that. But it's not related to us applied mathematics majors... Well, unless you transfer to theoretical physics..." Applied mathematics and theoretical physics were similar, so it was not that unusual for people to transfer. Most people transferred for the fat physics research budget. "No way I would transfer," said Huang Guangming as he shook his head and walked away. "Of course you couldn't transfer, you're not like Lu Zhou," said Shi Shang. He patted Guangming's shoulder with a look of defeat. Lu Zhou, " ... ?" Rome was not built in a day. A well-established theory required inspiration and time. Over the next few days, Lu Zhou spent all his day time at the library, and all his night time in his dorm. Occasionally, he would have to reply to Professor Frank's email. However, since there was no new data from CERN, he did not have to do too much work.

Although other people could not understand, he himself was happy.

Lu Zhou felt fulfilled.

The second week of September, on a sunny morning, Lu Zhou leaned against his chair in the library. He glanced at the dozens of papers in front of him and said with relief, "Finally done!"

All it took was some inspiration to solve the bottleneck. After that, he could cruise through the rest.

He was exhausted but he also had an unexplainable pleasant feeling.

It was not just because he solved another difficult mathematics conjecture, but it was also because while he was solving this problem, it deepened his understanding of group theory. This gave him new tools in his mathematics toolbox.

This was more exciting than the conjecture itself.

Hilbert once said that Fermat's Great Theorem was a chicken that could lay golden eggs, Not because the chicken had fed a large number of mathematicians, and nor was it because the chicken had given many journals a chance to publish their sub-par papers, but because through it, many novel mathematical methods were derived.

Inspired by the Fermat problem, Kummer introduced the concept of ideal numbers and found the only decomposition theorem that decomposed the number of a circular domain into an ideal prime factor. This theorem had been promoted today by Dedekind and Kroneeck. It occupied a central position in the theory of modern numbers, and its significance had gone far beyond the scope of number theory.

Lu Zhou's work at the Princeton conference was the same. His applied topology method solved the twin prime conjecture.

The original sieve theory was applied by Mr. Chen, and the number theory community believed that in order to solve the Goldbach's conjecture in the form of "1+1", they needed a new method.

It appeared now that the sieve method was more useful than they thought.

Even the professor that introduced the sieve theory in 1995 had not expected this.

This is the value of number theory.

While Lu Zhou was solving the Polignac's conjecture, he also found a unique solution. He named this method "Structure Research Method of the Group Theory" or "Group Structure Method" for short. Using the group theory method, the problem of infinity was studied as a whole. The "K=1" form was extended to "k is an infinite natural number", which thoroughly proved that "for all natural numbers k, there are infinite pairs of prime numbers (p, The proposition of p+2k)". The conclusion might be one only sentence, but it took up several blackboards to prove. Lu Zhou spent an entire day organizing the proof on his computer before converting it into PDF format. As he looked at the finished product on his screen, he nodded with satisfaction. "This should do." He could still write more on his Group Structure Method. However, Group Structure Method was not the focus of his thesis. So far, the Polignac's conjecture had been proved. While it might seem that the proof was only an extension of the twin prime conjecture proof, but no one other than Lu Zhou knew of its difficulty. Lu Zhou added a sentence to his thesis. [... Due to structural reasons, the Group Structure Method theory will be explained in my next thesis.]

Re-format, upload.
Target, Annual Mathematics!
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"Yes," answered Professor Deligne as he held a pen and wrote a few question marks on the paper. In a casual manner, he said, "Missing that conference was your biggest mistake of the year."
Edward Witten smiled and said, "Haha, I agree. Especially since I met him in person, my regrets have gotten stronger."
Deligne looked at him and said, "Oh? When did you fly across the Pacific Ocean?"
Edward Witten, "Other side of Atlantic. Did you forget that I just got back from there?"
Professor Deligne raised his eyebrows and asked, "You met that kid at CERN?"
With a smile, Edward Witten said, "Did you not look at the news recently?"
Professor Deligne shook his head and said, "I didn't, why? Is there anything new?"
Edward Witten, "The LHCb International Cooperation Group published news on the pentaquark. They also found a characteristic peak at the 750 GeV energy zone. They think it could be supersymmetric particles."
"Oh, congratulations. You're one step closer to the Nobel Prize," said Professor Deligne casually.
In a nutshell, supersymmetry discussed a symmetrical connection between a fermion and a boson, which could be seen to some extent as a low-energy deduction of superstring theory.

If the superstring theory was correct, then supersymmetric particles must exist.

So the reverse was that if supersymmetric particles were found, they could provide powerful experimental evidence for superstring theory, but it wouldn't be a rigorous proof.

If they did not find it, the superstring theory would be disproved.

However, Professor Deligne was not particularly concerned about the physics world. His focus was on pure mathematical physics.

Especially number theory and algebraic geometry.

"It's too early for congratulations," said Edward Witten with a smile. He then joked, "I think my Nobel Prize would be behind Stephen Hawking... I won't have a chance."

Only an experimentally proven theory could win a Nobel Prize. Finding the string that made up the universe was much more difficult than proving the black hole evaporation theory.

The latter was theoretically achievable. It only required creating a black hole on a tiny scale. Then, one could use equipment to observe this blackhole evaporate at the speed of light.

However, the former could not be solved by the Hadron Collider. It would take generations to create a collider that could observe in the one dimension.

It was impossible to prove the superstring theory with the current existing technologies.

When Professor Deligne heard his friend speaking in a self-deprecating tone, he smiled and said, "He was also listening to the report?"

Edward Witten smiled and said, "He wasn't listening. He was reporting. Can you believe it? The 750 GeV clue was presented by an intern. He used a probabilistic method to calculate the probability of a

characteristic peak appearing in the 750 GeV energy region, and then guess what happened? CERN researchers did a month of experiments and found this characteristic peak on the Hadron Collider."
Professor Deligne stared at the thesis for a long time before he suddenly said, "I didn't realize he was so talented in physics as well."
"Yeah," said Edward Witten as he nodded his head with approval. He then said, "I heard he's coming to Princeton next year. I want to accept him as my student."
Deligne said, "That would depend on his own choices. I think that he's more talented in number theory."
Edward Witten smiled and did not respond.
He hoped that Lu Zhou would choose him but Lu Zhou might not choose either of them.
When Professor Deligne turned to the last page of the thesis, his eyebrows twitched.
Edward Witten asked, "What?"
Deligne shook his head as he replied, "Nothing."
He was just praising the cleverness of the Group Structure Method, but when he read the last line, he was shocked.
If Lu Zhou's thesis was bad, he would have written him an angry email.
A major conjecture took a lot of time to test its correctness.

Lu Zhou did not know how long this would take, but he hoped that the review process was faster. Hopefully, it could be done before the end of the year.

After the Polignac's conjecture came to an end, Lu Zhou spent all his time on Mr. Frank's project.

Frank would communicate through email about the supersymmetric supplement theory. Although Lu Zhou had doubts about the theory, he still tried to seek common ground while reserving his opinions.

Lu Zhou had no choice. He could only pick out mathematical problems from the theory, and he was unable to build his own theory.

The main part of this supersymmetric complement theory was mainly done by Mr. Frank. Lu Zhou was responsible for processing the data and repairing the mathematical loopholes of the theory from a mathematical point of view, thus making it look more mathematically aesthetic.

Lu Zhou's work was actually very important.

The reason why string theory was accepted by others was that it was mathematically beautiful.

It was soon October when Professor Lu called Lu Zhou into his office.

"We're going to Beijing on the 20th. I've already booked the ticket for you, so start preparing."

Out of curiosity, Lu Zhou asked, "Okay... Professor, can you tell me why we're going?"

Professor Lu smiled and replied, "Nothing, it's just the Twelfth National Chinese Mathematical Society Conference. It's also the 80th anniversary of the founding of the Communist Party. Several old guys proposed to have the conferences together. Also, that Old Qiu guy will come, so I'll bring you along."

The f*ck?

Why do you sound so calm? This is a big deal! Lu Zhou wondered, "Isn't the conference in November? Why is it in October? Also, why are you going to a mathematics conference? Aren't you a physicist?" However, that was not the main point since Lu Zhou remembered that this conference was by invitation only. Finally, Lu Zhou asked, "Can you go without an invitation?" "I have the invitation, don't worry about it. Just come with me. This is a good thing for you," said Profesor Lu as he waved his hand. He then said, "Oh yeah, isn't your research topic the Polignac's conjecture? Is there any new research results? If there is, I suggest you apply for a report at this conference. This is a good opportunity." Reporting at such a high-level conference was a great honor. Even though Professor Lu was engaged in theoretical physics, he was no stranger to the mathematics world. At this moment, however, he did not know that the Polignac's conjecture thesis was already submitted to Annual Mathematics by Lu Zhou. It was already in the peer review process. Theses that were submitted could not be reported at conferences as it would be counted as a double submission. Lu Zhou began to think over it carefully. Other than the Polignac's conjecture, he did not have any other interesting research results to present. However, he did have his "Group Structure Method" which could be considered a research result.

Maybe I'll just type up a Group Structure Method thesis and report it at the conference!

Lu Zhou smiled at Professor Lu and said, "I'll prepare something."
Professor Lu smiled and said, "Okay then, go prepare. Oh yeah, the deadline for submission is next Friday. Hurry up."
Lu Zhou, "?!"
The f*ck?
You're only telling me now!
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Similar to these two were the Euler's theorem and Fermat's theorem. Lu Zhou originally planned to use these two examples, but these two already had a fairly simple group theory proof method.
Especially the latter, it only took three lines to prove. There was no room for improvement.
Using his method would be a little redundant.
Finally, Lu Zhou submitted his thesis the day before the deadline.
On the morning of 20th October, Lu Zhou dragged his suitcase and went on the airplane with Professor Lu. They flew from Jin Ling to Beijing.
This year's academic conference host was Beijing Normal University, and the organizer was the China Mathematics Society.

Since it was also the 80th anniversary of the China Mathematics Society, the conference was exceptionally grand. Many internationally well-known mathematicians were invited to attend this conference.

Lu Zhou's accommodation was at the Emperor Dragon Hotel. The invited guests already had their food and room expenses paid for, so he only had to pay for the \$800 yuan registration fee.

However, this fee was already paid by Professor Lu.

He had to admit that it was nice working with a rich supervisor.

Of course, one also had to be worthy enough to be his student.

Once they arrived at the airport, they got on Yan Xinjue's car.

When they arrived at the hotel, Yan Xinjue went to park the car while the two went in first. When they stepped in the elevator, Lu Zhou saw Yan Xinjue walking toward them and he could not help but ask, "Student Yan, you're also attending this conference?"

Yan Xinjue smiled. Before he could say anything else, Professor Lu interrupted and said, "This kid's coming for fun. Don't mind him."

Yan Xinjue smiled and said, "What do you mean for fun? I'm supporting Lu Zhou."

Lu Zhou was embarrassed as he said, "I'm only doing a report. Nothing major."

Yan Xinjue patted his shoulder and said, "Humble, but I'll congratulate you in advance! Oh yeah, aren't you doing a report on stage? What hairstyle should you do? Make it handsome."

Lu Zhou, "...?"

Professor Lu smiled but he did not speak. Lu Zhou was confused by both of them.
I feel like these two are hiding something from me.
Why am I not in the loop

After Lu Zhou went to his hotel room and left his suitcase there, he then went to the hall to eat.
Today was mainly for admission. The conference would officially start tomorrow.
The conference would last for five days. It would end on the 25th.
Due to the importance of the conference, the entire hotel was booked by the China Mathematics Society.
Once Lu Zhou finished eating, he looked around. He noticed that the average age of the people here was around 40 years old, and only the waiter was as young as him.
Lu Zhou quickly finished his dinner and he planned to go back to his room.
Suddenly, while he was walking to the elevator, someone greeted him and walked over with a smile.
"Hello, you're Lu Zhou, right?"
"Yes, you are?" asked Lu Zhou as he looked at him suspiciously. He could not recognize this guy at all.

"Wei Siyang, PhD student at Aurora University," said the young man as he shook Lu Zhou's hand. With a smile, he said, "I saw you at the Princeton Conference, but I didn't get the chance to speak with you. You're too famous!" "What do you mean famous... Nice to meet you," said Lu Zhou as he forced a smile. Even though he knew he was nutty, he still did not like being complimented. Wei Siyang smiled and introduced Lu Zhou to the old man behind him, "Let me introduce you to my boss, Professor Ma Changan. He's in the algebraic geometry field, 2017 academician nominee!" Professor Ma had a majestic face. Professor Ma Changan smiled and waved his hand. He said to his student, "What do you mean nominee, stop bragging about me. The organization hasn't even decided yet." Even though he reprimanded his student, it was obvious he liked to be complimented. Professor Ma smiled at Lu Zhou and said, "I've done thirty years of research, but have little success. You young people really are impressive. It's quite admirable" With a smile, Lu Zhou replied humbly, "Professor Ma, you're too kind. I still have lots to learn." "Being humble is good. If I achieved as much as you at your age, I would've been bragging my ass off," said Professor Ma with a smile. He then said, "I heard you were researching Polignac's conjecture?" The Ten Thousand People Initiative research projects were not confidential.

Lu Zhou smiled and replied, "Yeah."

Professor Ma lifted his eyebrows and said, "How's the research going?"

Lu Zhou smiled and said, "There's some progress." The review process for major mathematics conjecture process was slow. It could take months. The Annual Mathematics journal had not responded yet. His thesis status was still in "peer review" so he could not just say he proved it. Professor Ma was interested as he smiled and said, "Oh, it seems that you have some ideas?" Lu Zhou smiled and said, "You could say that." Professor Ma smiled and said, "I'm doing some research on number theory as well. Why don't you look at my thesis and we can exchange some ideas?" Lu Zhou was stunned. He looked at this professor with doubts in his mind. It was very rash to request others to look at unfinished research work. Not to mention, Lu Zhou was not his student, so there was no reason for him to look at the professor's work. In the end, Lu Zhou smiled and said, "There's no need for that. I like to study mathematics alone so I won't waste your precious time." Chapter 195 Lu Zhou was stunned. He felt that the professor was a little unhappy.

That's strange. Why did this professor care so much about my opinion?

What a weird guy.	
When Lu Zhou saw Ma Changan's back as he walked away, he did not know what had just happened.	
A day later, the 12th National China Mathematics Society and 80th Anniversary Academic conference officially kicked off.	!
Inside the grand auditorium, people started to crowd on the red carpet.	
Even though the conference had not even begun, people were already bragging left and right.	
Domestic conferences were different from foreign conferences. The primary goal for domestic conferences was not for academic exchanges. Instead, it was an opportunity to make friends.	
Unfortunately, before this conference even began, Lu Zhou had already offended a big name.	
However, he felt that his rejection was nicely put and did not think too much into it.	
Maybe next time he should lie and pretend that he did not make any progress on Polignac's conjecture	re?
Lu Zhou, who went into the venue with Professor Lu, excused himself to go to the toilet. When he returned, Professor Lu was nowhere to be found.	
He looked around in the venue and could not find Professor Lu, but he did find Yan Xinjue.	
Yan Xinjue was chatting with a handsome man who wore glasses.	

Just as Lu Zhou walked up and was about to say hello, Yan Xinjue was already one step ahead of him as he said, "Come, let me introduce you to Professor Yang Zhiguang, our outstanding alumni from University of Jin Ling!"

When Lu Zhou heard this name, he was stunned for a moment. He then said, "Professor Yang Zhiguang, nice to meet you!"

Yang Zhiguang was impressive. Lu Zhou saw his name on the University of Jin Ling's Hall of Fame.

Graduated from the University of Jin Ling in 1985, he obtained a master's degree from the Chinese Academy of Sciences in 1989 before he went to study at the University of Augsburg in Germany. After obtaining his Ph.D., he then did two years of research at the Technical University of Munich.

When he returned to China in 1994, he worked in the Institute of Mathematics of the Chinese Academy of Sciences. He was selected into the "Hundred Talents Program" of the Chinese Academy of Sciences, and won major awards such as "Feng Kang Scientific Computing Award" and "National Natural Science Second Prize".

Of course, the nuttiest part was that this guy reported for 45 minutes at the 2006 International Conference of Mathematicians in Spain.

He was the only speaker from China at that conference!

Yang Zhiguang was absolutely qualified to be a 2017 academician!

However, his research area was different than Lu Zhou. While Lu Zhou did not know much about what he studied, he knew that the professor was engaged in numerical analysis and scientific calculation.

His direction was not purely mathematical, but it was more to applied mathematics and was closely related to engineering.

Lu Zhou was not surprised to see him here.

What he did not expect was that Professor Yang Zhiguang looked so young. If Yan Xinjue did not introduce Lu Zhou to him, Lu Zhou would have thought that the guy was 30 years old. The truth was that Yang Zhiguang was already in his 50's.

In comparison, Yan Xinjue who was only in his 30's already had a receding hairline.

"Hello," said Yang Zhiguang as he shook Lu Zhou's hand. He said rather enthusiastically, "I was just talking about your glorious deeds. I didn't expect to meet you so quickly. What an honor!"

Lu Zhou smiled and replied humbly, "What glorious deeds... Your research results have brought benefits to the entire country. My research is all theoretically, it's not even worth mentioning!"

As a physicist, Yan Xinjue could not converse with these two.

Yang Zhiguang held Lu Zhou's hand as said humbly, "Don't be too modest, your calculation methods are of a textbook level. The entire country will be using them! Professor Liu of the Institute of Polymer Materials of the Chinese Academy of Sciences was very proud of your achievements! Every time I talked about you, he would praise your work. He said it has bridged the gap between materials science and mathematics as well as igniting the fire of stars in computational materials science. Not to mention, your work in number theory... Even international masters have praised you."

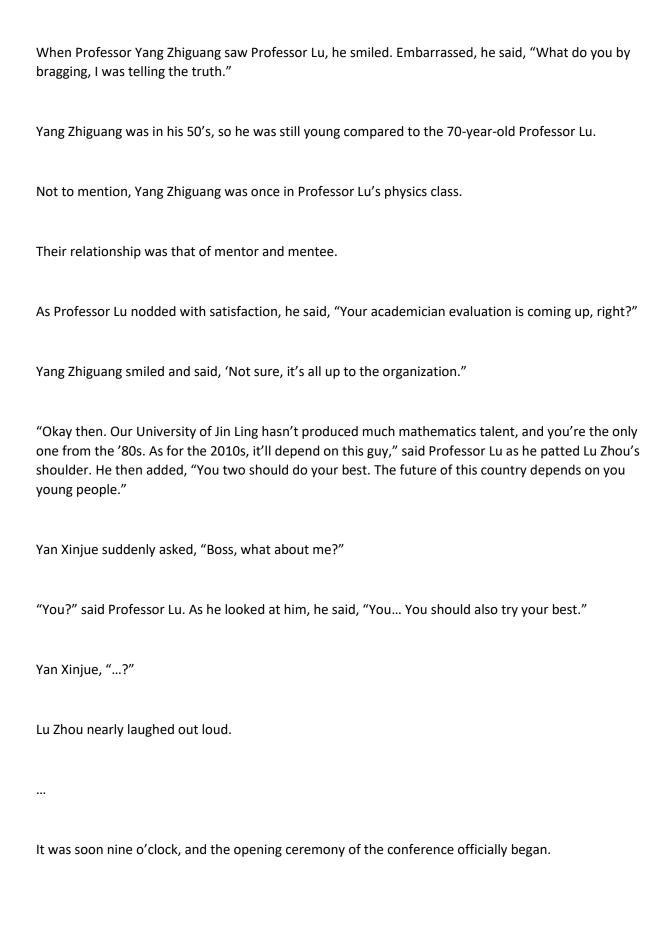
F*ck me, this is way too exaggerated!

I just wrote one computational material thesis. What do you mean by bridging the gap?

Lu Zhou did not know what to say.

Fortunately, Professor Lu came over, and he was saved by the bell.

"Fine, stop bragging you two. I can't listen to it anymore!"



Professor Wang Shicheng of the Chinese Mathematical Society delivered an opening speech.

He was then followed by the chairman of the International Mathematical Union, Sen Chongwen, as well as Hergi Horton and the other international mathematicians. They all came to celebrate China Mathematics Society's 80th birthday.

These scholars had been researching since the '80s, and they came from all around the world.

After Professor Wen Lan announced the opening of the conference with a, "Always follow your heart, wherever it may lead you", the conference erupted in applause.

The end of the opening ceremony was the highlight of the conference. Soon, it was the Loo-Keng Hua Mathematics Award and Shiing-Shen Chern Mathematics Award ceremony!

The former was aimed at professors over the age of 50 while the latter was aimed at young scholars under the age of 50. There were two candidates per award.

The prize money was only \$100,000 yuan but the meaning was significant.

Especially the Shiing-Shen Chern Mathematics Award; it was considered a domestic Fields Medal.

Winners of the Loo-Keng Hua Mathematics Award were academicians Lin and Liu from the University of Sichuan. They were rewarded for their outstanding contributions in computational mathematics and topology.

Soon after, the most exciting moment came.

Professor Qiu Chengtong stood on the podium and smiled. He shook hands with Professor Wang Shicheng before he took over the microphone.

The Shiing-Shen Chern Mathematics Award young scholar award would be awarded by this old gentleman.

The applause gradually subsided.

The old man cleared his throat and said slowly, "The first winner is Professor Yang Zhiguang from the Institute of Mathematics of the Chinese Academy of Sciences. His main research results are systematic research on the perfect matching layer method (PML) for wave scattering problems and the wave source transfer region splitting algorithm for high-frequency Helmholtz equations. He established a mathematical foundation for the famous Peaceman machine model in the engineering world..."

"The second award winner is..."

Professor Qiu flipped to the next page and adjusted his glasses before he announced it loudly.

"Lu Zhou!"

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However, it was still a surprise that a kid won this award.

Professor Qiu pushed his glasses and continued to speak in a steady tone.

"... The main research results of Lu Zhou are the Zhou's theorem, the twin prime conjecture, and the use of topological methods to further supplement the sieve theory. He created his own unique insights not only in the field of pure mathematics but also applied mathematics. His research results have been highly praised by Professor Bawendi. All of these achievements are commendable for such a young scholar."

This was impressive for a young scholar because even an old scholar who had been doing research for decades might not be able to achieve this level.

As for qualifications...

Since Lu Zhou received recognition from Professor Qiu, no one objected.

Applause sound soon reverberated through the venue. It was like a thunderstorm, spreading from the front row to the back. Lu Zhou stared at the podium with his eyes wide opened. He finally knew what Professor Lu was hiding, and why Yan Xinjue and Professor Liu were congratulating him. He had never expected that the China Mathematics Society would grant him such an honor. Although the Shiing-Shen Chern Mathematics Award was for younger scholars, it had never been awarded to a twenty-something-year-old. Professor Yang Zhiguang was not shocked. His thick face was neutral. He had expected it. He patted Lu Zhou's shoulder and said, "Go on, Lu Zhou. Go up the stage and take your award." "Oh..." murmured Lu Zhou as he nodded. He then stood up and walked on the red carpet. As he slowly approached the stage, his heart was beating so fast that it almost jumped out of his chest. However, the second he stepped onto the stage, his heart calmed down. When Lu Zhou received the gold medal and certificate from Professor Qiu, he said politely, "Thank you." Professor Qiu smiled and replied, "You're welcome. You deserve this honor!"

Professor Qiu nodded toward Professor Yang Zhiguang and said, "You two winners, say whatever you want."
Yang Zhiguang smiled and said, "I'll let the younger one talks first."
Lu Zhou was unprepared, but Professor Qiu already handed him the microphone.
He took the microphone. He then took a deep breath before he looked at the audience and said with a steady but excited voice, "Thank you, University of Jin Ling, for cultivating me. Thank you, China Mathematics Society, for giving me this award. I'll continue to strive for greater mathematics results!"
"Thank you!"
His award speech was very short.
It was only three sentences.
However, his speech was genuine and not exaggerated.
Clap clap clap
The venue exploded with applause.
Professor Lu looked at the podium with approval and applauded gently.
Yan Xinjue was even more excited. His hands were red from clapping and he even shouted out loud, "F*ck, Zhou, you're nutty!"

Receiving the Shiing-Shen Chern Mathematics Award at 21 years old If it was him, he would have bragged about it for the rest of his life.
"Be polite!"
Even though Professor Lu reprimanded Yan Xinjue, his face was full of smiles.
It was not just mathematicians who were applauding, even the undergraduate students from Peking University Union who was standing at the entrance of the venue joined in.
The person standing on stage was their age. Maybe even younger
That was why they were applauding.
Lu Zhou had set an example for them.
Of course, some people were unhappy about this young winner.
For example, someone who nearly received the reward
Wei Siyang sat at the back of the venue. He had an awkward expression on his face. His hands were rested on his legs, and he did not care to applaud.
The reason was that his boss was sitting next to him. His boss' face had turned red. If Wei Siyang clapped, he was afraid that he would not be able to graduate.
Professor Ma Changan stared at the person on stage. His mood was terribly gloomy.

He was not furious because Lu Zhou rejected him earlier, but because this honor should have belonged to him.

It was a long story.

The domestic mathematics community was not big, but there were a lot of niche communities.

In 1952, China had a change to the national university system. The authorities asked for domestic universities to imitate the British system. As a result, the mathematics department of both the University of Shuimu and the University of Zhi was cut. Instead, the nation built University of Yan and University of Aurora.

Now, the domestic mathematics community could be divided into the University of Yan, the China Academy of Sciences, and the University of Aurora.

Some said the system change was a waste of academic resources.

The most famous was probably Professor Feng. He was unable to become an academician due to this change.

In the end, this gentleman was hired to be the dean of mathematics at the Chinese Academy of Sciences. However, he was still unable to become an academician.

It was obvious that the selection process of becoming an academician was not "absolute".

Of course, not anyone could become one. One had to have some academic background.

Professor Ma Changan was a member of the University of Aurora. He had prepared for the 2017 academician selection for a long time. He spent the last 20 years working hard at the department of mathematics at Aurora.

However, his academic capital was still too small compared to professors that only did research. He had not even written one major research thesis.
Of course, he had written a few small theses, but most of them were collaborations.
The hardest part was that in China, only the first author mattered.
Therefore, he set his sights on the Shiing-Shen Chern Mathematics Award.
If he received this Shiing-Shen Chern Mathematics Award, this would add to his qualifications and he might be able to become an academician.
He had been preparing for this award for years.
He had even planned his award speech.
However, this kid just stole the award from him!
Chapter 197
He looked at the student next to his desk and said, "Xiao Li, give Professor Wang some tea."
"Okay!"
Xiao Li put his pen down and respectfully poured some tea for the two old professors.
It was not Professor Wang Yuping first visit, so he casually took the cup and sat down on the sofa.
Professor Xiang Huanan was still flipping through the journal as he chatted with his old friend, "Why aren't you at the mathematics conference? What are you doing here?"

"They're not giving me a prize, so why should I go? I'd rather come here to your cool office," said Professor Wang Yuping. He smiled and said, "But I heard that this conference was interesting. The morning opening ceremony was presented by Qiu Chengtong. He gave the Shiing-Shen Chern Mathematics Award to some twenty year old. The rumor was that this award belonged to Ma Changan, but it seems that he was screwed over."

This was big news to old Xiang.

However, Professor Xiang was not surprised by who won. Instead, Xiang Huanan was surprised as he looked at his friend and asked, "That Wang Shicheng guy actually bowed down to Qiu Chengtong?"

Due to a professor named Tian, Professor Qiu was unhappy with the department of mathematics at the University of Yan.

In 2001, University of Yan invited a MIT professor to become an academician. Professor Qiu Chengtong was unhappy about it and he said to the press, "I'm the one that deserves to become an academician."

This incident blew up in the country, but in the end it ended in a low-key manner.

However, Professor Qiu Chengtong and the University of Yan never solved their issue. Professor Qiu Chengtong eventually transfered to University of Shuimu due to this incident.

However, not everyone was obsessed with faction, and not everyone was passionate about power.

Especially the old professors who had already made a name for themselves. Their name alone counted as academic capital. They were not overly obsessive and were easy going.

Professor Wang Yuping, for example, was one of those professors who did not care about fame or fortune. He was just an old professor who was really passionate about education.

Due to this, even though he taught at the University of Yan, his relationship with Professor Qiu Chengtong had been quite good. He would often come to the Chinese Academy of Sciences to visit his old friend.

Professor Wang Yuping sipped some tea before saying, "He had to bow. If Ma Changan won the Shiing-Shen Chern Mathematics Award, it would be ungodly embarrassing."

"Are you sure?" asked Professor Xiang Huanan.

"Of course. Why do you think Old Qiu came back? He came back just so he could tell Academician Wang Shicheng that the Federal Mathematics Society is considering about giving Lu Zhou the Cole Prize."

Professor Xiang Huanan was stunned for a moment. He then smiled and said, "This is a bit serious. No wonder Academician Wang is unhappy."

It was not too bad if the winner did not deserve the prize. However, if the loser went overseas and won an even bigger prize there, then that would be a problem.

The media would start to gossip and maybe even talked about conspiracy theories.

If a twenty year old kid defeated several academicians, he would surely deserved the Cole Prize, right?

However, people were not that stupid.

After all, the weight of the Cole Prize was much heavier than the Shiing-Shen Chern Mathematics Award.

"It seems that this conference is a bit interesting. Wang Shicheng actually took the initiative to shake hands with Qiu Chengtong. It's a pity that I missed it," Professor Xiang said with a smile.

Professor Wang Yuping smiled and said, "It's interesting. I plan on going over there tomorrow to check it out. I heard that the kid has a 30 minute report. It seems that when he was researching Polignac's conjecture, he found out some group structure method. I read his thesis, and it looks interesting. His report skill level is high, so it would be a pity to miss it."

"That kid's skill level is high. I could tell that from the oral defense," said Professor Xiang Huanan with a smile. He added, "It's a pity that Lu Shenjian stole him away. Otherwise, I would've been the one guiding him to the award."

"Don't mention it. It still pisses me off," said Professor Wang Yuping as he slapped his thigh. He said, "That Lu guy is a physicist, and he stole one of our mathematicians. How dare he!"

Professor Xiang Huanan smiled and said, "Well, why don't you go tell Old Lu to his face?"

Professor Wang Yuping smiled and said, "That... Never mind. I'm afraid I might give him a heart attack."

Xiang Huanan smiled and shook his head as he flipped the journal page.

Suddenly, he froze.

He looked at the thesis from top to bottom again, and his face became more and more serious. When he read the last line, he paused for a long time.

After a while, Professor Xiang Huanan suddenly asked, "That report... What time is it? Where?"

Professor Wang Yuping was sipping his tea when he casually replied, "Three o'clock in the afternoon, Beijing Normal University. Why? Are you going?"

"I have to go..." Xiang Huanan sighed and placed the Annual Mathematics journal on the table. He then said, "Look at it yourself."

Chapter 198

Professor Wang Shicheng had a stiff smile as he said, "Of course. I admire Old Qiu's work on partial differential equations."

Professor Wang Shicheng was not lying as Professor Qiu Chengtong was one of the leading mathematicians in the country.

If it was another weak person?
Wang Shicheng would have berated them.
Professor Qiu did not have a good temper, and he disliked domestic learning values.
Everyone were academics, so they had a certain demeanor.
Not to mention, the President and Secretary-General of the International Mathematical Union were here, so no matter how troublesome their own people were, he still had to be calm on the outside.
On the other hand, it was not only Professor Qiu Chengtong who was being surrounded by reporters. Even the winners of the Loo-Keng Hua and Shiing-Shen Chern Mathematics Awards were also surrounded.
Especially Lu Zhou.
A 21-year-old winner was really amazing!
This was big news to the reporters.
A reporter rushed over and chased after Lu Zhou to ask, "Mr. Lu Zhou, what thoughts do you have with regards to winning the Shiing-Shen Chern Mathematics Award?"
Lu Zhou smiled and said, "I'm very excited. I don't have any thoughts!"
A foreign journalist rushed over and asked in fluent Chinese, "Mr. Lu Zhou, the rumor is that Professor Qiu and Professor Lu have beef and that this Shiing-Shen Chern Mathematics Award was given to you by Qiu Chengtong. Is this true?"

scholar. I have no comment regarding personal issues!"
"Mr. Lu Zhou, can I please get your WeChat?"
A young female journalist from the journalism department of Beijing Normal University came over.
However, would Lu Zhou be tempted by her beauty?
Of course not!
In order to avoid being entangled by this lady, Lu Zhou chose to be interviewed.
The questions were firing at Lu Zhou, and he soon felt numb in his head. He quickly moved through the crowd.
Motherf*cker, why is it so difficult to accept an award
On the other hand, Professor Yang Zhiguang was comfortable with such a scene. He always had a smile on his face that offended no one.
When Lu Zhou finally escaped from the Beijing Normal University auditorium, he sat in Yan Xinjue's car.
"Where is Professor Lu?"
"Professor Lu went to eat with his old friends. We'll eat back at the hotel," said Yan Xinjue. He smiled and said, "Lu Zhou! Not bad! 21-year-old Shiing-Shen Chern Mathematics Award winner. You'll probably earn the Fields Medal by the time you're thirty."

Lu Zhou smiled and said, "Speaking of which, how did you guys know beforehand that I would win?"

"I accidentally knew it since Professor Lu is very well connected. I think he got it from Old Qiu. Then one day, he spilled the news when drunk and I heard it," said Yan Xinjue while he was driving the car. He added, "I actually wanted to tell you, but Professor Lu wouldn't let me. Don't blame me." Lu Zhou smiled and said, "Of course not, why would I blame you? It's not like you should have leaked it." Yan Xinjue asked, "What next? Are you still going to develop toward mathematical physics?" "Yes," said Lu Zhou as he nodded. He then said, "Mathematics is an important scientific research tool. It's like a knife, and it can be used in any discipline. The work of a mathematics researcher is like sharpening this knife. But, I'm not only interested in sharpening the knife, but I'm also interested in using the knife." Yan Xinjue said, "Not bad, that's some nice bullsh*ting. I look forward to seeing you on stage in Stockholm." Stockholm was where the Nobel Prize was given. However, this award was only given to major scientific discoveries. It was not easy to get. Lu Zhou smiled and said, "I hope." The opening ceremony of the 12th Chinese Mathematical Society came to an end. An official congress was held in the afternoon and the next board of directors, as well as the next secretary-general and chairman, were selected

While the conference was going on, Lu Zhou was on Weibo.

He had to admire the journalists. They had already sent out the press releases.

The journalists attached a short video and eye-catching titles for clickbait.	
[Surprised! Shiing-Shen Chern Mathematics Award winner is a 21-year-old!]	
[Named the Chinese Fields Medal, anyone that won the Shiing-Shen Chern Mathematics A genius]	ward is a
[Who could've thought that this year's Shiing-Shen Chern Mathematics Award was given to	o him!]
[]	
Without surprise, this hot news was once again on trending.	
The short video showed Lu Zhou on stage. The first media outlet that posted this video had comment section blow up.	d their
[What is the Shiing-Shen Chern Mathematics Award?]	
[It's one of the most famous mathematics prizes! How do you not know?]	
[21 years old, isn't that a bit young? I remember most of the past winners are in their fortion	es]
[How many forty-year-olds can achieve this level of success? This guy will probably win the Medal!]	: Fields
[Praise the Chinese Mathematics Society for not being ageist!]	
[Wu Yan and old dog Zhu must be furious!]	

Lu Zhou did not know about the discussion online.

At night, he went to the dinner hosted by the Chinese Mathematics Society.

As the Shiing-Shen Chern Mathematics Award winner, and as the youngest winner of all time, Lu Zhou became the star of the party.

Many young scholars wanted to speak with him.

Even the older scholars respected his humbleness and passion.

Even the academician from China Mathematics Society, Wang Shicheng, was eager to speak with him.

Not just that, Wang Shicheng praised Lu Zhou's work in front of many people. He also offered Lu Zhou to go to the University of Yan.

Lu Zhou was tempted as the mathematics department of the University of Yan was top in the country. Not to mention, under the University of Yan, he might become the youngest academician ever.

However, he still had to keep his word. Lu Zhou already agreed to be part of the University of Jin Ling's training program.

Therefore, he euphemistically refused this invitation and told Professor Wang the reason, which was that he had already received the offer from Princeton and that he would go next year to get his PhD.

When Professor Wang heard his explanation, he was understanding. Professor Wang said that if Lu Zhou ever wanted to teach or speak at the University of Yan, he would be welcomed with both arms open. Chapter 199

[... All bow down to this genius student!]

[Master, are you taking in students? I'm Luo Li Yin~~]
[Foreign mathematics professors are getting paid a million a year, check it out!]
[Hello, Mr. Lu. Here's the situation, I proved Goldbach's conjecture, but the Chinese Academy of Sciences wouldn't let me submit. I cannot take this shame. I want to go to Harvard University, I want to meet Qiu Chengtong, but I don't have the money. Please send me a 100k and I will write your name in as a co-author of the thesis!]
[]
Lu Zhou was humored.
He was amused by the persistence of his fans.
Lu Zhou felt like he had not been on Weibo for a long time. No wonder his fans were so persistence. Maybe he should interact with them?
He sent out a blog post.
[I'm graduating next year, and I'm really flattered to suddenly win this medal. I hope I have no regrets this year!]
Lu Zhou then attached a photo of his gold medal before he sent it.
After he went to get some water, he refreshed the page and dozens of comments came rolling in.
[Wait a minute, didn't you just graduate this year???]

[Bow to genius student]
[I'm still writing my thesis, I'm about to cry.]
[My master's career is full of regrets.]
[As a undergraduate student, I'm in despair.]
[]
When Lu Zhou saw the negative comments, he buried his head in the pillow and could not hold back his laughter.
He still had to do the report.
Thankfully his report was in the afternoon, otherwise, he would still be hungover.
Lu Zhou ate some lunch and cleaned up his room. He then stood in front of the mirror and tried a couple of hairstyles. Then Yan Xinjue called him to come downstairs. He drove Lu Zhou to Beijing Normal University.
Lu Zhou stood on the podium and started the PowerPoint.
He glanced across the stage and saw that there were quite a lot of people. The seats were all filled, but people were still entering.
Lu Zhou was a bit shocked.

He thought that the seats would be half full at most. After all, there were quite a lot of reports going on, and his report was nothing special. It was only a little group theory method.
When he saw the crowd, he started to think.
Is this the celebrity effect?
A Shiing-Shen Chern Mathematics Award is influential!
Shook!
Once the ten-minute preparation time was over, the report officially began.
Lu Zhou flipped to the first page of the PowerPoint and started to give a brief overview of the content of his report.
"While studying the Polignac's conjecture, I studied Mr. Hilbert's proof of the infiniteness of prime numbers, which greatly inspired me. Especially the study of using group theory to solve the number theory problem. I made a lot of interesting and improved changes to Mr. Hilbert's paper."
" I'll call my version the "Group Structure Method".
"When it comes to infinite prime numbers, this approach can simplify many complex problems"
Lu Zhou started to go in depth of his thesis. He spent twenty minutes to talk about the core ideas and concepts of the Group Structure Method.
In order to save time, he spoke very quickly. The crowd was also paying attention.
What surprised him was that he saw an old man taking notes.

He felt even more motivated to give a good report.
Finally, the presentation ended. The next session was the most important questioning session.
A random 40-year-old guy raised his hand and asked a question, "I have a question, line 47 in your thesis. The n=(2n,m) is abruptly mentioned in Wilson's theorem. The even-order cyclic group G has a unique second-order element a^ n. Isn't this somewhat less rigorous?"
When Lu Zhou heard this question, he laughed before he answered it with ease.
"Maybe not so, I wanted to save space and omitted some of the unrelated steps.
He picked up a marker and wrote the steps on a whiteboard.
From a^n \in G, and a^n =2, a^m \in G, and a^m =2, the order of a^m is 2n/(2n,m), which gives 2n/(2n,m)=2.
Then n divides m, a^m∈ <a^n></a^n>
Therefore, it can be proven that the even-order cyclic group G has a unique second-order element a^n
]
It was well-founded and convincing.

The questioner looked at the steps on the whiteboard and nodded, "Thank you."
"You're welcome." Lu Zhou nodded his head and went to the next question.
Only people who were interested would stay, and anyone that was uninterested would have left after the presentation.
Lu Zhou was surprised to see a lot of people interested in his method.
As such, he answered every question in detail.
Suddenly, a familiar voice came from the venue.
"I have a question."
When Lu Zhou saw the person standing up, he was stunned.
Isn't this
Professor Ma?
Lu Zhou smiled and said, "Please ask."
He was curious as to what Professor Ma would say.
Professor Ma Changan smiled politely as he acted like a kind old man.
However, when he opened his mouth, he was not so kind anymore.

"Whether it's Wilson's theorem or the infinite problem of prime numbers, both have been proven by group theory. Especially the latter, Hilbert has given a fairly complete group theory proof. And the method you proposed seems to me, redundant." This question was easy to answer. Lu Zhou smiled and he was about to answer the question. However, Professor Ma Changan did not allow him to speak. Instead, Professor Ma Changan continued to ask. "Of course, I'm not doubting the value of your research. But I question if this small research project deserves to be discussed here... " "... I noticed that you have answered the questions in detail. But you didn't answer your own research topic, which is Polignac's conjecture. I can't help but ask, did you actually come up with this method while researching the Polignac's conjecture? If so, how is it used to solve Polignac's conjecture?" Ma Changan had a smirk on his face as he continued to attack, "... I think we all know that you chose Polignac's conjecture for your research topic for the Ten Thousand People Initiative, which probably got a million in grants. I think we're all looking forward to your research results, but is this all you came up with?" Chapter 200 However... Sitting to his left, an old professor coughed before he spoke loud and clear, "Um, Ma Changan, how about you sit down. You can ask this question after the report is over. This report is for academic questions." Ma Changan was stunned as he did not expect people to refute him. Wei Siyang turned his face and when he saw the old professor, he was shocked.

It's actually Academician Guo!



You're talking about a scientific methodology to me?
Do I look like a politician to you?
Lu Zhou was about to speak before another familiar voice came from the crowd.
"Let me say something."
An old man from the back of the venue slowly stood up. His voice was impatient as he asked, "I don't know if Ma Changan reads Annual Mathematics?"
When Lu Zhou saw the old man, he was surprised.
This
Isn't he Academician Xiang Huanan from the Chinese Academy of Sciences? He was one of the judges from my undergraduate oral defense!
It has been a while.
When Professor Ma Changan heard this question, his heart dropped.
A mathematician not subscribed to Annual Mathematics was like an undergraduate student coming to class without a textbook.
Professor Ma Changan smiled and said, "Academician Xiang, you're funny. Every mathematics office at Aurora University has a copy of it."
"Then you haven't read it?" asked Professor Xiang Huanan. He then said, "Maybe read the latest issue of Annual Mathematics, it might answer your question."

Ma Changan did not understand and so, he asked, "What do you mean?"
Professor Xiang smiled and calmly said, "In the latest edition of Annual Mathematics, the thesis for the Polignac's conjecture proof was published. The author is the guy currently standing on the stage. The method he used to solve the Polignac's conjecture is the so-called "Group Structure Method".
The venue was dead silent.
Some people were oblivious.
Some people, like academician Guo, had already read the latest issue of Annual Mathematics.
However, they were in the minority.
Most people had a look of astonishment on their faces They could not believe it!
They could not believe that the young guy that solved the twin prime conjecture at the beginning of the year, had expanded the k=1 form to infinity, and solved the Polignac's conjecture!
Some people did not know why the Chinese Mathematics Society gave the Shiing-Shen Chern Mathematics Award to such a young person.
Now, it was all clear.
He was definitely worthy of this award!
When Professor Ma Changan heard this news, he froze and he was at lost of words.
He could not believe it.

However, he also knew that Professor Xiang was not lying. His face turned red, but he did not know what to say. He wanted to sit down, but his legs could not At this moment, he was the laughing stock. Sitting close by, Professor Guo shook his head. There was nothing wrong with asking questions at an academic conference. However, for someone to ask a question like Ma Changan, he better be damned sure that his question was backed by evidence. Otherwise, he would lose all credibility. An academic conference was no place for rhetorical questions. Not to mention it was in front of so many people. Even though Professor Hong was his friend, he could not help Professor Ma Changan. There was no way Professor Hong could support his friend's 2017 election anymore. It seemed that Professor Ma Changan would not become an academician after all. At least not until he accomplishes some big achievement... Professor Guo could not help but look at the man on stage. The young man was calm as a cucumber. He did not even mention about publishing his major thesis.

Meanwhile, Professor Ma Changan just stood there as he dug his grave deeper.

The young man on stage had a mature-like mentality!