

## D. School 55

### Chapter 55 - Dialogue between geniuses

“I got some inspiration from Hamilton’s assumptions about the program of your closed three-dimensional manifold geometry conjecture proof, I think I can prove these assumptions ...”, Lu Qiuqian said of his own The idea, “Establish a key ellipse estimate, apply thickness decomposition to prove your geometric guessing ...”

Lu Qiuqian studied while looking at the expressions of the two professors on the opposite side, intending to decide based on their expressions whether he wanted to explain the contents he explained more clearly.

The two professors gave two opposite expressions. Thurston listened with interest, but Professor Nan’s face was full of confusion. When Lu Qiuqian looked over, he waved and said, “It’s okay, don’t worry about me, this is not mine In the field of research, I just listen to it. You should talk to Professor Thurston! “

“It’s an interesting idea!” Professor Thurston touched his chin and said, “Using the previous collapse results on the lower bound of local curvature, we can give an accurate proof of this guess!”

What Lu Qiuqian wrote on the test paper is only one direction. Professor Thurston speculated on the means he used based on his short sentences, which saved him a lot of time. “That ’s the case, use an i The monotonic form of flow holds in all dimensions without the assumption of curvature ... “

So the question and answer between you and me started. Lu Qiuqian found that Professor Thurston’s way of studying mathematics was very intuitive. His amazing visual ability often enabled him to “see” a certain three-dimensional The conclusion of the manifold is correct. Even if he cannot give a rigorous proof, if someone can complete the proof process, he will find that the answer he gets is exactly the same as Professor Thurston’s prediction.

If you put a mathematician with very strict requirements on the process, you will find the dialogue with Thurston very difficult, but in Lu Qiuqian’s view, this dialogue is more efficient and saves time, which is like two people. Go players play, mortals can see the situation after three steps, and Thurston can see seven steps away. Lu Qiuqian can also do this, so the average person may play chess to the middle plate, and The two men randomly placed dozens of pieces on the chessboard, and the result of this round was exposed to the two.

Thurston also felt that the conversation with Lu Qiujian was very appetizing. After the old scholars listened to his conjecture, he usually let him give the derivation process. These tedious tasks made him tireless; and Lu Qiujian was listening. After his description, he can quickly build a model of this guess in his mind, and then deduce more results, which makes him feel that he meets and hates late.

At the beginning, Thurston was able to sit upright in a chair and chat with Lu Qiujian in a soothing rhythm. Later, the more he talked, the more excited, sometimes waving his arms to express excitement, and sometimes patting the table hard to express doubt. After that, Xu Yu laughed and laughed at himself for finding the wrong direction. Annoyed by the door, Anna thought that there was a fight in the office and came in several times in a row.

“Perfect chain!” When Lu Qiujian finished the last derivation process, Thurston praised both with regret and regret. The relief was because another boulder in front of the mathematician would be removed. Unfortunately, Such a beautiful conversation seems to be over!

“Okay, shall we go to dinner now?” Professor Nan, who was listening to the exchange between them, showed his watch. “It is now nine o’clock in the evening. Are you all hungry? “

“OK! OK! Let’s go!”, Thurston smiled embarrassedly at Professor Nan, “I’m welcome to dinner, thank you for bringing me such a wonderful Christmas gift!”

“No, let me do it!” Professor Nan shook his finger. “At noon, I argued with Dyson and Witten for a long time. It seems that this time I am going to win this gambling! Examination at the School of Physics It’s over, they do n’t have the opportunity to send these seven questions to students as exam papers! “

“Ha ha ha ha!”, Rare to hear Professor Nan make a joke, Thurston and Lv Qiujian laughed at the same time.

Put on his coat and the three of them walked out of the office. Poor Anna was still on her desk outside the door, boredly browsing Yi Bei’s product advertisements.

“Sorry, Anna! I forgot to get you off work!” Professor Nan was a little embarrassed. She just went in and out a few times. Why didn’t she think about it, “You can go back now, I will go to school after Christmas Apply for a promotion and salary increase in recognition of your outstanding work in this segment! “

It was n't that she made a low-level mistake, how could she have the opportunity to witness this great discovery that shakes the entire world of mathematics! It seems that she is her lucky star! Professor Nan thought so.

Professor Nan drove them to a Chinese restaurant in a secret corner. The cooked Ren greeted the boss and waiter in the shop and looked at Lu Qiujian's curious look. He explained, . From Chen Shengshen and Qiu Chengtong to people like Shi Yigong and me, to young people like you, Princeton has always been short of Chinese people, so there are a few Chinese restaurants that are normal! The taste of this shop is very authentic, You can try it later! “

Without looking at the menu, Professor Nan reported a long list of dishes, and finally specially asked for a bottle of Maotai, which was called Lu Qiujian's celebration.

When the wine came up, Professor Nan blocked Lu Qiujian, filled the glass for him and Thurston himself, and finally picked up the glass and said, “Come on, the first cup congratulates that another pearl in the mathematical crown was successfully picked! “

The three of them drank it all, and Thurston sucked his tongue after drinking, “South, this wine is too strong!”

“Haha, what did this count!” Professor Nan laughed and refilled their glasses while saying, “When I was in Moscow, the vodka they drank with Grisha was much better than this!”

But looking at Thurston's general expression of drinking medicine, after the first three glasses of toast, Professor Nan no longer poured him liquor, and patiently asked about the follow-up work, “When do you plan to complete the paper? Send it there In this magazine? “

“Now the derivation chain has been completed, and it can be completed in more than a month?”, Lu Qiujian replied, “As for the goal of submission, I have been publishing an article in the” Annual Mathematics “before. It 's better to choose them next time, what 's your opinion? “

“No, no, it won't take a month at all!” Thurston interjected without waiting for Professor Nan to speak. “I tell you how to write a thesis. You can do it in half a month. Take out the paper! “