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Memories

Some memories of Ky Fan (樊士畿) in the period of his directorship at the Institute of Mathematics, Academia Sinica and his later visits

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Professor Ky Fan served as the Director of Institute of Mathematics, Academia Sinica (AS) in Taiwan for two consecutive terms from 1978 to 1984.

I collected some memories and anecdotes about Ky Fan (the title Professor will also be omitted below) from some colleagues who were members of the Institute of Mathematics, AS during that time, including Hsuan-Pei Lee (李宣北), Chii-Ruey Hwang (黃啟瑞), Jing Yu (于靖), and myself among others.

Since 1978, under the directorship of Ky Fan, emphasis was placed on fundamental research, this being possible with the increase of research funding in accordance with the first Five-Year Plan of the Academia Sinica. As a mathematician, Ky Fan was well-known internationally, and he had a vision for the development of mathematics in Taiwan. It is generally believed that his two terms of directorship were decisive for the later development of the Institute of Mathematics.

“The beginning of the 1980’s was a new era for the Institute. He made great efforts to hire young mathematicians. He talked to and particularly persuaded President Shih-Liang Chien (錢思亮) of AS to open positions in mathematics. In those days, the Director stayed in the United States most of time and stayed in Nankang (南港), Taipei, for a short period every year. Director Fan encouraged us to do good math. He stressed that the value of the research papers is not just counted by the number of pages of the papers. I deeply appreciated his encouragement and advice.” -- Jing Yu.

“I have the same memory about Professor Fan’s insisting on doing good mathematics, his making all possible efforts to recruit young mathematicians, and his kindness as well as generosity not only to young people but also to other fellow mathematicians in Taiwan.” -- Hsuan-Pei Lee.

The quotations above recall the mission of AS, which was to promote, support, and encourage basic research in Taiwan. Jing Yu expressed his appreciation of Ky Fan’s efforts to convince the Taiwan National Science Council (NSC) committee to be flexible when dealing with bureaucratic rules. In 1982, Jing Yu was offered a one year Boursier du Gouvernement Français fellowship visiting Orsay, he was also eligible for a one year NSC fellow doing research abroad. Jing Yu tried to combine these visits so that he could stay with his family for two consecutive years in Paris. Due to the efforts and support from Director Fan, finally he was able to do so.

In retrospect these two years were very precious to his development into a mature mathematician. There were also other similar cases in which Director Fan viewed the bureaucratic rules in more flexible manner and sent researchers to visit or to attend conferences abroad.

Ky Fan always emphasized the importance of basic research to the colleagues. The Institute has been offering a one-year internship to fresh bachelors and masters who aim to pursue their interests in mathematics, after which the participants usually entered Ph.D. programs in Taiwan or abroad. Ky Fan told us that the interns need to be exposed to more mathematics. His constant encouragement has stimulated the research atmosphere of the Institute.

After Ky Fan completed his director terms, we had opportunity to meet him in Taiwan and abroad on several occasions. I remember that Ky Fan, accompanied by his wife, went to the NSC Summer Symposium at Sun Moon Lake (日月潭) in 1990. This was probably the last summer symposium organized directly by the NSC Math Center. If memory serves me well, it was in the spring of 1987 that Ky Fan returned to the Institute to give a series of lectures. During his stay, Ky Fan was a guest and witnessed the wedding ceremony of I-Liang Chern (陳宣良) in March of that year. Jing Yu last saw Ky Fan in Beijing 2003, at the 90th anniversary of the Mathematics Department of Peking University, his alma mater and noticed that he was still in high spirits.

The book “Analytic Geometry and Algebra” (in Chinese), translated by Ky Fan from two German math textbooks when he studied at Peking University, was well-known to several of my colleagues in their school days. For example, Chii-Ruey Hwang read this book when he was a high school student and some colleagues read it during their undergraduate studies in Taiwan.

The story of Ky Fan encouraging Louis de Branges to promote his proof of the Bieberbach conjecture is well-known in Nankang. Many of us heard it from Ky Fan directly. Since de Branges had made a few false claims, almost nobody believed that he finally solved the Bieberbach conjecture. Ky Fan knew de Branges and his research well and said to him, “The only way to save you is for you to go to Leningrad, and if they say yes, then people will believe you.”

There was a very strong group in complex analysis at Steklov Institute of Mathematics in Leningrad. Finally, de Branges’ proof of the Bieberbach conjecture was validated and significantly simplified. He then became famous.