Professor Gu Chaohao

THE ACADEMIC CAREER AND ACCOMPLISHMENT OF PROFESSOR GU CHAOHAO

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Dedicated to Professor Gu Chaohao on the occasion of his 70th birthday and his 50th year of educational work

Born on May 15, 1926 in Wenzhou, Zhejiang Province, China, Professor Gu Chao-hao graduated from the Mathematics Department of Zhejiang University in 1948 and received the degree of Doctor of physical and mathematical sciences from Moscow State University in 1959.

Professor Gu used to hold a number of positions, such as, Chairman of the Mathematics Department and Vice President of Fudan University, President of the University of Science and Technology of China, Director of the Guiding Committee for University Mathematics and Mechanics Instruction under the State Education Commission, a deputy of the third, sixth and seventh sessions of the National People's Congress, a member of the fifth session of the Chinese People's Political Consultative Conference and a member of the Standing Committee of its eighth session. At present, he is still the Director of the Institute of Mathematics of Fudan University.

In the past fifty years, with a keen awareness of the mission for developing China's science and a conscientious dedication to mathematical study, Professor Gu has all along stuck to intensive mathematics teaching and research. In spite of the heavy loads upon him in administrative work and social activities, he was able to make outstanding contributions to the both fields.

In his unremitting efforts to train mathematics talents, Professor Gu has greatly helped to bring up a large number of students, leading them onto their own way of mathematical research. Now many of them have become leaders or the backbone force in their respective departments and special areas. Because of his significant contributions to the educational cause of China, Professor Gu has been awarded many honors and titles such as the national advanced worker in 1956, a national labor model of the education in 1993, etc. Moreover, some university textbooks written by him with his group have received prizes for excellence from the state.

He became an academician of the Chinese Academy of Sciences in 1980. Now he is the leading scientist for the national research project "nonlinear science". His research interest covers a wide area of mathematics and he has made a remarkable contribution to differential geometry, partial differential equations and mathematical physics. Thanks to his major accomplishments in both pure and applied mathematics, he is highly reputed in the world mathematics community.

In 1946–1948, he gave summer courses in mathematics for students in middle schools. Beginning from 1948, Professor Gu took up the study of differential geometry of generalized spaces under the guidance of his teacher Professor Su Buqing, and soon assumed an important role in the Chinese school of differential geometry headed by Professor Su. At first he initiated a new approach to the space of K-spreads and obtained a series of results which received a detailed review in the first issue of the Soviet journal "Mathematical Reviews". He successfully gave a proof on the global embedding theorem of affine connection spaces and Finsler spaces. During his study in Moscow State University in 1957-1959, Professor Gu, on presenting his doctor thesis on pseudogroups of transformations which is taken as "the first important result to push forward this theory after E. Cartan", became the then only Chinese scholar who has won a degree of doctor of sciences in this university.

Upon returning home from the Soviet Union in 1959, Professor Gu turned his chief attention to the new research field - partial differential equations. From the very beginning, he showed his insight by basing his study on mathematical problems of supersonic