

Prof. Zhi-Ming Ma 's Curriculum Vitae

Professor Zhi-Ming MA
Academician of CAS,
Chairman of Graduate Degree Committee of AMSS
Fellow of TWAS
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Zhi-Ming Ma, mathematician, born on January 25, 1948, in Sichuan Province, China. He graduated from Chongqing Normal University in 1978, obtained his Ph.D degree from the Chinese Academy of Sciences(CAS) in 1984.

He is now the chairman of the graduate degree committee of Academy of Math and Systems Science, Chinese Academy of Sciences, a professor of Institute of Applied Math, AMSS.

Zhi-Ming Ma has made important contributions in the theory of Dirichlet forms and Markov processes. He joint with his co-authors found a new framework of quasi-regular Dirichlet forms which corresponds to right processes in one-to-one manner. This result completes a twenty years old problem in the area. The framework of quasi-regular Dirichlet forms has been used e.g. in the study of infinite dimensional analysis, quantum field theory, the theory of Markov processes, and others. Their book 'An Introduction to the Theory of (Non-symmetric) Dirichlet Forms' has been reviewed as 'the second major book in the direction of connecting Dirichlet forms with Markov processes' and has been frequently referred. In Malliavin calculus Zhi-Ming Ma with his co-authors proved that the capacities of Wiener spaces are invariant under the change of Gross measurable norms. This result settled the problem concerned by Prof. P. Malliavin and Prof. K. Ito respectively and is of basic for the invariance of Malliavin Calculus. He has obtained also other important results concerning the Schroediner equations, Feynman-Kac semi-groups, Charatheodory-Finsler manifolds, Nowhere Radon smooth measures and others. One of Prof. Ma's earlier important contributions was his proof of the Feynman-Kac probabilistic representation of mixed boundary problems of Schrodinger operators with measure-valued potentials. In this work he solved an open problem posed by a prominent probabilist K.L.Chung.

Being recognized for his contributions to mathematics, Prof. Ma was awarded the First Class Prize for Natural Sciences by the Chinese Academy of Sciences, the Max-Planck Research Award by the Max-Planck Society and Alexander von Humboldt Foundation, the Chinese National Natural Sciences Prize, the S. S. Chern Mathematics Prize, the Qiu-Shi Outstanding Young Scholars Prize, the He-Liang-He-Li Sciences and Technology Progress Prize, and the Hua Loo-Keng Mathematics Prize

Professor Ma was elected an Academician of the Chinese Academy of Sciences in 1995 and a Fellow of the Third World Academy of Sciences in 1999. He was elected and has been serving as the President of the Chinese Mathematical Society from January 2000 to December 2003, and was elected an Executive Committee member of the International Mathematical Union (IMU) in 2002. He was the Chairman of the Organizing Committee of the International Congress of Mathematicians held in Beijing in 2002 (ICM2002).

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