

Wai-Ki CHING

Executive Summary (2012)

Wai-Ki Ching is an Associate Professor (with tenure) in the Department of Mathematics at the University of Hong Kong. He obtained his B. Sci. (Hons) and M. Phil. degrees from the University of Hong Kong in 1991 and 1994 respectively. He then received his Ph.D. degree from the Chinese University of Hong Kong in 1998. He was a visiting post-doc Fellow at the Cambridge University in 1999. Before taking up the lectureship at his Alma Mater in 2001, he was a lecturer in the Faculty of Mathematical Studies at the University of Southampton (2000-2001). He was awarded the Best Student Paper Prize (2nd Prize) in the Copper Mountain Conference (Colorado University and SIAM) U.S.A. (1998), the Outstanding Ph.D. Thesis Prize in the Engineering Faculty, the Chinese University of Hong Kong, Hong Kong (1998), the Certificate of Merit in the IEEE (Hong Kong Section) Postgraduate Student Paper Contest, Hong Kong (1998), the Croucher Foundation Fellowship, Hong Kong (1999) and Doris Zimmern HKU-Cambridge Hughes Hall Fellowship (2011).

Ching's research focus is Mathematical Modeling and Applied Computing. In particular, the applications of stochastic models and numerical algorithms in solving problems related to Markov chains, bioinformatics, complex systems, data mining, epidemiology, financial mathematics and game theory. He is an author/editor of more than 250 publications including 4 books, 5 edited journal special issues, over 130 refereed journal papers, over 40 refereed book chapters and over 50 conference proceeding papers. Ching has reviewed papers for more than 60 different international journals. Currently, he is on the editorial board of *Advances in Decision Sciences*, *International Journal of Intelligent Engineering Informatics* and *East Asian Journal on Applied Mathematics*. He has been the chief editor of *Mathematical Modelling and Applied Computing* (2006-2009) and associate editor of *Journal of Applied Mathematics and Decision Sciences* (2006-2009). He has obtained over 1.95 millions HK dollars research grants as the principal investigator (including RGC Competitive Earmarked Research Grants, External Consultancy Grants, Hung Hing Ying Physical Research Grants and Learnet Grant), and over 2.00 millions HK dollars as a co-investigator.

Apart from academic research, he also committed in training high quality postgraduate students and currently he is supervising 7 Ph.D. students. Under his supervision, 10 M. Phil. students and 5 Ph.D. students have been graduated. His Ph.D. graduates got lectureships from world-renown universities such as Fudan University and Hong Kong Baptist University and post-doc fellowships at Oxford University, Harvard University and Max Planck Institute. His students also won the following awards: Excellent Student Paper Award in the 36th C& IE conference, Taiwan, (2006); Outstanding Research Postgraduate Student Award, HKU, (2007,2011); DAAD Summer School Travel Award, China, (2007); University Postgraduate Fellowships, HKU, (2009,2010,2011); Excellent Student Paper Award in the World Congress on Engineering, U.K., (2009); the 5th APBC Conference Travel Award, India, (2010); IMS workshop Travel Award, Columbia University, U.S.(2011), the Best Paper Award in CSO2011, Kunming, China (2011) and Hung Hing Ying Scholarship, HKU, (2011).

He has organized and served as program committee members in more than 40 conferences and workshops. He has presented over 50 talks. He also provided consultancy services to a number of local companies and the HKSAR government including PCCW, China Light and Power, Hong Kong Government Environmental Protection Department, Hong Kong Hospital Authority, ExchangeRepublic.com, Education Bureau and ETI Consulting Limited.