The Hong Kong Polytechnic University
Department of Applied Mathematics

Colloquium

On
Risk Measures and Backward Stochastic Difference Equations

by
Professor Robert J. Elliott
University of Adelaide

Abstract
A key question in Mathematical Finance is: Given a future random payoff X, what are you willing to pay today for X? One could also ask: How risky is the future position X? Many attempts have been made to answer this question including Expected utility, CAPM, Convex Risk Measures, Value at Risk etc. In a simple discrete time framework, including the familiar binomial model, we shall describe a new answer to this question.

Biography
Robert Elliott received Bachelors and Masters degrees from Oxford University, and his Ph.D. and D.Sc. from Cambridge University. He has held positions at Newcastle, Yale, Oxford, Warwick, Hull, Alberta, and visiting positions in Toronto, Northwestern, Kentucky, Brown, Paris, Denmark, Hong Kong and Australia. From 2001 to 2009 he was the RBC Financial Group Professor of Finance at the University of Calgary, Canada, where he is also an Adjunct Professor in both the Department of Mathematics and the Department of Electrical Engineering. Currently he is an Australian Professorial Fellow at the University of Adelaide. Professor Elliott has authored nine books and over 450 papers. His book with PE Kopp "Mathematics of Financial Markets" was published by Springer in 1999 and has been reprinted three times. The Hungarian edition was published in 2000 and the second Edition was published in September 2004. An edition in China was published in 2010. Springer Verlag published his book "Binomial Methods in Finance", written with John van der Hoek, in the summer of 2005. He has also worked in signal processing and his book with L Aggoun and J Moore on "Hidden Markov Models: Estimation and Control" was published in 1995 by Springer Verlag and reprinted in 1997. A revised and expanded edition was printed in 2008. His book with L Aggoun "Measure Theory and Filtering" was published by Cambridge University Press in June 2004. His earlier book "Stochastic Calculus and Applications" was published by Springer in 1982 and a Russian translation appeared in 1986.

Date	:	**February 24, 2012 (Friday)**
Time	:	**2:30 p.m. – 3:30 p.m.**
Venue	:	**HJ610, The Hong Kong Polytechnic University**

***** ALL ARE WELCOME *****