1020-90-165 **Srdjan D Stojanovic*** (srdjan@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221-0025. *Neutral derivative pricing and hedging under multi-dimensional risks in incomplete markets: theory and applications.*

"Neutral derivative pricing" is a pricing paradigm appropriate for tradable contracts (as contrasted to the paradigm of "indifference pricing" appropriate for non-tradable, such as, OTC contracts). The "neutral" pricing PDE (under HARA and CARA utility of wealth), which might be the ultimate generalization of the classical Black-Scholes PDE is derived. The completely general (the most conservative, i.e., the Black-Scholes-type) hedging formula is derived as well. Among many applications, a new and elaborate model for pricing equity is introduced; its explicit solution is found, and "The Dividend Puzzle" of F. Black is solved quantitatively.

Stojanovic, S. D., "Higher dimensional fair option pricing and hedging under HARA and CARA utilities" (August 2005; revised June 28, 2006). Available at SSRN: http://ssrn.com/abstract=912763.

Stojanovic, S. D., "The dividend puzzle unpuzzled" (January 29, 2006). Available at SSRN: http://ssrn.com/abstract=879514 (Received August 26, 2006)