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Bruno Dupire* (bdupire@bloomberg.net), NY. *Arbitrage Bounds for Volatility Derivatives and the Skorokhod embedding Problem.*

Options on realized variance are booming, although no satisfactory pricing model has emerged yet. We establish the arbitrage bounds that the price of vanilla options of the same maturity impose, under the sole assumption of continuity, by exploiting some solutions of the Skorokhod embedding problem. We construct the direct (ROOT) and reverse (ROST) barrier solutions, as free boundaries of two different optimal stopping problems. (Received September 26, 2006)