Boston University Statistics and Probability Seminar Series

The Leland Approximation for European Options

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Abstract: In 1985 Leland suggested an approach to pricing contingent claims under proportional transaction costs. Its main idea is to use the classical Black Scholes formula with a suitably enlarged volatility for a periodically revised portfolio whose terminal value approximates the pay-o h(ST) = (ST ..K)+ of the call-option. In subsequent studies, Lott, Kabanov and Safarian, Gamys and Kabanov provided a rigorous mathematical analysis and established that the hedging portfolio approximates this pay-o in the case where the trans- action costs decrease to zero as the number of revisions tends to in

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For directions and maps, please see *http://math.bu.edu/research/statistics/statseminar.html.*