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**Dmitry Kramkov** and **Mihai Sirbu\*** ([sirbu@math.columbia.edu](mailto:sirbu@math.columbia.edu)), Department of Mathematics, 2990 Broadway, New York, NY 10027. *Asymptotic analysis of utility-based hedging strategies for small number of contingent claims.*

In the framework of incomplete financial models the role of hedging strategy is to provide the optimal trade-off between risk (error of replication) and return. We study the linear approximation of utility-based hedging strategies for small number of contingent claims. We show that this approximation is actually a mean-variance hedging strategy under an appropriate choice of a numéraire and a risk-neutral probability. (Received September 18, 2006)