1015-60-154 **Mingxin Xu*** (mxu2@email.uncc.edu), Department of Mathematics and Statistics, 9201 University City Blvd., Charlotte, NC 28223. *Risk measure pricing and hedging in incomplete markets.*

This work attempts to extend the complete market option pricing theory to incomplete markets. Instead of eliminating the risk by a perfect hedging portfolio, partial hedging will be adopted and some residual risk at expiration will be tolerated. The risk measure (or risk indifference) prices charged for buying or selling an option are associated to the capital required for dynamic hedging so that the risk exposure will not increase. The associated optimal hedging portfolio is decided by minimizing a convex measure of risk. I will give the definition of risk-efficient options and confirm that options evaluated by risk measure pricing rules are indeed risk-efficient. Relationships to utility indifference pricing and pricing by valuation and stress measures will be discussed. Examples using the shortfall risk measure and average VaR will be shown. (Received February 02, 2006)