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Semere Habtemicael* (semere.habtemicael@ndsu.edu), Department of Mathematics, North Dakota State University, NDSU Dept # 2750, Minard Hall 408, Fargo, ND 58103, and **Indranil SenGupta**. *Pricing of variance and volatility swap for financial derivatives.*

Swap is a financial derivative in which two counter parties exchange cash flows of financial instrument. Variance and volatility swaps are becoming increasingly popular in financial market. These are financial instruments that provide an easy way for investors to gain exposure to the future level of volatility. In this presentation we use non-Gaussian Ornstein-Uhlenbeck process driven by Lévy subordinators to model the dynamics of stock price and used this model to price variance, volatility, covariance and correlation swaps. We use S&P500 index data for our regression fit. (Received December 08, 2014)