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Modelling of Variance and Volatility Swaps with Stochastic Volatility and Jumps

In this presentation, we will introduce the financial derivatives variance and volatility swaps. A general analytic approach for pricing discretely sampled variance and volatility swaps under Heston stochastic volatility model will be presented. We investigate the effect of asset price jumps on fair swaps strikes. The closed form pricing formula for variance swap under exponential Lévy Process will also be discussed.