

1112-91-648      **Oleg Bondarenko\*** ([olegb@uic.edu](mailto:olegb@uic.edu)), Department of Finance (MC 168), 601 S. Morgan Street, Chicago, IL 60607. *Robust Replication of Variance Derivatives*.

The demand for new volatility instruments has grown exponentially over the past decade. In this talk, I will discuss a novel approach for valuing variance derivatives in incomplete markets. The approach deviates from the existing literature by focusing on the empirically relevant realized variance, as opposed to the unobservable integrated variance. This distinction is critical for hedging actual variance instruments, such as OTC variance swaps and the CBOE variance futures. The new approach is completely model-free. It allows for jumps in the underlying price process and applies to any sampling partition. I introduce and characterize the whole class of generalized variance payoffs which can be exactly replicated under these general conditions. (Received August 11, 2015)