



THE UNIVERSITY OF
CHICAGO

Department of Statistics
DISSERTATION PROPOSAL

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Asymptotics on LETF and VIX Option Pricing

TUESDAY, November 26, 2013, at 2:00 PM

118 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

I will talk about the application of asymptotic techniques on LETF and VIX option pricing. For LETF option, under general stochastic volatility assumption, we derive simple and model-independent approximations for LETF implied volatility using options on the underlying ETF. We also provide a simple hedging strategy for LETF options. For VIX option, we are able to get similar formulas. I will also discuss possibilities to extend the LETF results to jump models, and to find better ways to model VIX options.

For information about building access for persons with disabilities, please contact Matt Johnston at 773.702-0541 or send an email to mhj@galton.uchicago.edu. If you wish to subscribe to our email list, please visit the following web site: <https://lists.uchicago.edu/web/arc/statseminars>.