

***The Joint Usage and Research Center Project Workshop “The Estimation of Financial Volatility Using High-Frequency Data with Applications to Financial Risk Management”***

hosted by the Joint Usage and Research Center, Institute of Economic Research,  
Hitotsubashi University (Project #: IERPK1109)

Date: March 17, 2012

Place: Hiroshima University of Economics Tatemachi Campus

Organizers: Koichi Maekawa (Hiroshima University of Economics) and Toshiaki Watanabe (Hitotsubashi University)

Time: 30 minutes for presentation and 10 minutes for discussion

10:00-10:05 Opening Remarks

**Integrated Variance Estimation**

Chair: Koichi Maekawa (Hiroshima University of Economics)

10:05-10:45 Shuichi Nagata (Kwansei Gakuin University), “Efficiency gain of integrated variance estimation in the presence of jumps and market microstructure noise”

10:45-11:25 Daisuke Nagakura (Keio University), “State space methods for quadratic estimation of integrated variance in the presence of market microstructure noise”

**Empirical Analysis of Realized Volatility**

Chair: Koichi Maekawa (Hiroshima University of Economics)

11:25-12:05 Yasuyoshi Tokutsu (Hiroshima University of Economics), “Realized volatility and information”

12:05-12:45 Tetsuya Takaishi (Hiroshima University of Economics), “Finite sampling effects on the standardized returns of Tokyo Stock Exchange”

12:45-13:45 Lunch

**Invited Session**

Chair: Toshiaki Watanabe (Hitotsubashi University)

13:45-14:25 Mei-Hui Guo (National Sun Yat-sen University), “Model risk of the implied GARCH-normal model”

### **Variance Risk Premium and Option Implied Risk Aversion**

Chair: Toshiaki Watanabe (Hitotsubashi University)

14:25-15:05 Masato Ubukata (Kushiro Public University of Economics), “Market variance risk premiums in Japan as predictor variables and indicators of risk aversion”

15:05-15:45 Nattapol Takkabutr (Osaka University), “Risk neutral density and option implied risk aversion of the Nikkei 225”

15:45-16:00 Coffee Break

### **Realized GARCH and Stochastic Volatility Models**

Chair: Tetsuya Takaishi (Hiroshima University of Economics)

16:00-16:40 Asuka Takeuchi-Nogimori (Hitotsubashi University), “An empirical analysis of the Nikkei 225 put options using realized GARCH models”

16:40-17:20 Toshiaki Watanabe (Hitotsubashi University), “Volatility and quantile forecasts of financial returns using realized stochastic volatility models with generalized hyperbolic distribution”

### **Jump in High Frequency Financial Time Series**

Chair: Tetsuya Takaishi (Hiroshima University of Economics)

17:20-18:00 Koichi Maekawa (Hiroshima University of Economics), “Lee and Mykland's test for jump in high frequency financial time series”

18:30- Reception