

**The South Florida Chapter of  
The American Statistical Association  
Present**



**A New Variance Estimator for a Two-Phase Re-Stratified Sample  
With pps Sampling at Both Phases**

**By**

**Suojin Wang, Alan H. Dorfman & Lawrence R. Ernst**

**Date:** Wednesday, December 3, 2003 at 7:00 pm

**Place:** S&E 215, Florida Atlantic University

**All are welcome!**

**Abstract**

**In this talk we discuss variance estimation for population totals and ratios in complex, cross-stratified surveys in which the ultimate sampling weights are random variables, dependent on the first phase of sampling. Examples of such sample designs include the National Compensation Survey, which has motivated this research. A new hybrid variance estimator, dependent on both model-based and design-based ideas, is introduced. Theoretical and empirical justifications are given which demonstrate that the proposed method handles well the difficult aspects of this sample design.**

*\* Professor Suojin Wang, our distinguished guest speaker, is from Texas A&M University and he is a Fellow of the American Statistical Association.*

**Meeting Agenda:**

- Invited Talk by Professor Suojin Wang, 7:00 – 8:00 PM
- Chapter Election (for Secretary): 8:00 – 8:15 PM
- For further information please contact Hassan Zahedi at (305) 348-2927 or [zahedih@fiu.edu](mailto:zahedih@fiu.edu).

**MAP to S&E Building at FAU:**

<http://www.math.fau.edu/HTMLFILE/IMAGES/faumapMath.gif>