



The University of Chicago

Department of Statistics

Seminar Series

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**“Some extensions of Stein’s method”**

**MONDAY, February 20, 2006 at 4:00 PM**  
**133 Eckhart Hall, 5734 S. University Avenue**

*Refreshments following the seminar in Eckhart 110.*

### **ABSTRACT**

Stein’s method is a semi-classical tool for establishing convergence to standard distributions like Poisson or Normal, particularly effective in problems involving dependent systems of random variables. Stein’s attempts to derive deviation inequalities using his method, however, proved futile. The speaker will present his extension of Stein’s method which can be used to establish such inequalities. It gives a new and more powerful tool for normal approximation as well. Examples from dependence models of statistical physics and combinatorics will be worked out.