

UNIVERSITY OF GEORGIA DEPARTMENT OF STATISTICS

Ou Zhao University of South Carolina

"Central Limit Theorem -- as I know it"

In this talk I will quickly survey some recent progresses on the (conditional) central limit questions for stationary processes. One recent Markov chain example will be focused on, and its analysis is leading to some interesting phenomenon, which apparently we have not understood well yet. In vague terms, the partial sum of this Markov chain has variance growing faster than n, which delivers some challenge to prove the conditional CLT. But when we managed to show a CLT, it was found there is a `mass escaping' --- limiting variance gets smaller in some mysterious way. I will try to formulate some questions along the way.

This is a joint work with D. Volny and M. Woodroofe.

Thursday September 30, 2010 ROOM 306 Statistics Building University of Georgia Athens, GA 30602 3:30 P.M. – Room 306, Statistics Building Refreshments following talk at 4:30 P.M. in room 230 (The Cohen Room)