



Announcing

A COS Seminar

Feb 20, 2009 at 2:00 pm

Southern Hall 303

at The University of Southern Mississippi

Speaker: Chenhua Zhang

Department of Mathematics
The University of Southern Mississippi

Title: Parameter Estimation for First-order Bifurcating Autoregressive Processes with Weibull Type Innovations

Abstract:

We study the first-order bifurcating autoregressive processes with Weibull type innovations, i.e. $X_t = \phi X_{[t/2]} + \varepsilon_t$, where $[x]$ is the largest integer which does not exceed x , and $\{(\varepsilon_{2t}, \varepsilon_{2t+1})\}$ is a sequence of independent and identically distributed random vectors with Weibull type distribution. The coefficient ϕ and tail index α are two parameters we are interested in. Using point process methods, we obtain the joint limit distribution of $(\hat{\phi}_n, \hat{\alpha})$. They are asymptotically independent.

Further Information

Further details and information about this and other departmental activities is available online at http://www.math.usm.edu/bulletin_board/.