Meeting: 1006, Lubbock, Texas, SS 10A, Special Session on Extinction, Periodicity, and Chaos in Population and Epidemic Models

1006-92-155 **Abdul-Aziz Yakubu*** (ayakubu@howard.edu), Department of Mathematics, Howard University, Washington, DC 20059. *Discrete-time Epidemic Models.*

This talk is on discrete-time models for epidemic processes on attractors. Thresholds for disease persistence are computed and used to study the global behavior of simple epidemic processes. The potential dynamic complexity of the epidemic process on chaotic attractors are illustrated. Finally, the potential role of delayed recruitment (age-structure) on disease is explored via a model that differentiates between adults and juveniles. (Received February 14, 2005)