

1125-92-2216 **Xiang-Sheng Wang*** (xswang@louisiana.edu). *Age-structure model with periodic mature probability*. Preliminary report.

In this talk, we will study an age-structure model with periodic mature probability. By using characteristic line method and linear chain trick, we obtain an infinite dimensional differential system. Asymptotic analysis of the steady state solution for this system will be provided. We will also discuss computation of the basic reproduction number and dynamical behavior of the model system. (Received September 19, 2016)