1035-60-1280   **Marcus Agustin*** (`magusti@siue.edu`), Department of Mathematics and Statistics, Southern Illinois University Edwardsville, Edwardsville, IL 62026. *System Reliability: A Dynamic Model Using Counting Processes.* Preliminary report.

In this talk, a system of components will be considered where the failure of each component depends on the number of defects in the system and the failure rate contribution of each defect. The number of defects changes dynamically since removal of a defect may result in new defects being introduced to the system. The system is observed for a fixed time period and the main interest is to obtain the system reliability at the end of the observation period. (Received September 19, 2007)