

1125-VC-2571 **Celeste R Vallejo*** (cvallejo@ufl.edu) and **James E Keesling**. *Using Little's Law in Stochastic Modeling*. Preliminary report.

The ability to analyze a stochastic network or a queue is useful for many applications. This type of analysis can be applied to systems in such fields as epidemiology or business. In order to analyze these systems, it is necessary to make certain limiting assumptions that facilitate computation. This talk will introduce a new way to approach these systems. This new approach utilizes a theorem from operations research called Little's Law. Little's Law is typically used to determine an unknown parameter in a queuing system. In this talk, I will use Little's Law to begin the analysis of a system rather than as an aide in calculation. (Received September 20, 2016)