1067-90-2390   **Leilani Hendrina Gilpin*** (`lgilpin@ucsd.edu`). *Realization Relationships Between Communication Models.* Preliminary report.

Distributed autonomous routing algorithms are used to reach a consistent, global solution after nodes iteratively and independently collect, process and share information. This work focuses on studying how the network-communication model affects algorithm convergence. By defining a formally defined taxonomy, the hope is to further analyze how the algorithm convergence properties of different models in the taxonomy are related, and gain intuition about families of networks that oscillate. (Received September 23, 2010)