

1163-35-36

**Padi Fuster Aguilera\*** (rfustera@tulane.edu), 6823 St. Charles Avenue, New Orleans, LA 70118, and **Kun Zhao** and **Vincent R Martinez**. *A PDE model for chemotaxis with logarithmic sensitivity and logistic growth*. Preliminary report.

We study a particular model derived from a chemotaxis model with logarithmic sensitivity and logistic growth. We obtain existence and uniqueness of solutions as well as results for the limit diffusion of the solutions with Neumann boundary conditions. Numerical simulations are also included validating the analytical results and predicting some phenomena that are not proved analytically. (Received July 22, 2020)