1044-37-245 **H. Zhu*** (huaiping@mathstat.yorku.ca), 4700 Keele Street, Toronto, ON M3I1P3, Canada.

Bifurcations in a schistosomiasis model with delay in snail infections. Preliminary report.

We study a system of delay differential equations model for the transmission dynamics of schistosomiasis. We study both the stability and bifurcation of the model. Opposite to the usual backward bifurcation in disease infection models, the saddle-node bifurcation in this model reveals that the outbreak will not occur if the infection does not reach certain level even though the so-called reproduction number is great than one. This is a joint work with Hongjun Gao and Chunhua Shan. (Received September 02, 2008)