Mathematical Modeling and Simulation of Drug Resistance in Infectious Diseases

<u>L. T. T. An¹</u>

Minisymposium: Mathematical and Computational Problems in Life Sciences

Abstract: Infectious diseases are among the most common reasons causing death and burden in public heath, especially in developing countries. Nowadays they are exacerbating since many drugs have been loosing their effectiveness. This talk will summarize some previous classical models, and set-up a new model to study drug-resistance in parasites population. The test case is malaria, which is intensively studied in collaboration with public-health department at University of Heidelberg.

¹ Interdisciplinary Center for Scientific Computing (IWR), University of Heidelberg Im Neuenheimer Feld 368, 69120 Heidelberg, Germany an.lethithanh@iwr.uni-heidelberg.de