## Mathematical modeling of signal evaluation and cell motion

 $A{\tt NGELA STEVENS}^1 < {\tt stevens@mis.mpg.de} >$ 

Mathematical models of parabolic and of transport type are discussed, for cell motion due to diffusive and due to cell-surface bound signals. It is shown that different types of signal evaluation by the cells can lead to different macroscopic structures on the cell population level. Thus the analysis of pattern forming processes may be able to give hints on possible underlying mechanisms of signal detection during chemosensitive motion.

L

 $<sup>^1\</sup>mathrm{Max}\text{-}\mathrm{Planck}\text{-}\mathrm{Institut}$ f. Mathematik in den Naturwissenschaften