DAVIDE CUSSEDDU, CMAT Centre of Mathematics, University of Minho *A bulk–surface modelling framework for cell polarisation*

The bulk–surface wave–pinning model constitutes one of the simplest models of cell polarisation. It is a toy model that is derived from minimal key properties of GTPase proteins. In particular, the model takes into account the activation/inactivation dynamics as well as the spatial cycling of proteins between the cell membrane and the cytosol. In this talk I will present the model, some results and numerical simulations on different three–dimensional geometries.