**This folder contains all the essential code regarding the gradient matching approach presented in Xiao et al.**

File “**PDE\_GradientMatching\_Main**” and “**PDE\_GradientMatching\_Functions**” are used to produce parameter estimation results at different CVs.

File “**PDE\_GradientMatching\_FixPar**” and “**PDE\_GradientMatching\_Functions\_FixPar**” are used to produce parameter estimations at different CVs with certain parameter values constrained.

File “**PDE\_GradientMatching\_BootstrapSD**” is used to produce estimates of standard deviations using non-parametric boostrap.

File “**PDE\_GradientMatching\_PostProcess**” is used to process all the collected data and obtain the final results presented in the paper.

Folder “**SimRes1**” contains all the results and data simulated from the gradient matching scheme.

Folder “**MATLAB plots**” contains all the figures generated by MATLAB presented in the main part of the paper.