

Corrections from internal examiner

- 1) The introduction has serious flaws. It makes the reader think you are interested in analysing PET data, but in fact they only serve as example data for your numerical procedures, there is no analysis that aims at understanding the PET data in any scientific context. On the other hand there is little or no motivation towards model selection which is actually the main topic of the thesis. Hence, as also requested by external, re-structure your introduction to introduce and motivate clearly your main topic of model selection whilst being clear that you use the PET data as an application only. The data structure is spatio-temporal and you need to be clear that you are completely neglecting any spatial aspects and assume independence between the data sets throughout. However, as we also discussed during the viva, more details need to be provided firstly about the data (not clear how exactly the model relates to the data) and secondly why there is a need for model selection and what it means scientifically.
- 2) All figures in the thesis need appropriate explanation in the captions. There is generally not enough detail in the captions to understand many figures. Please reconsider the captions in all figures and correct as appropriate. For any time series plots, indicate where the measurements are in the plot (by including a circle at each measurement rather than just presenting a line). The reader needs to have a clearer idea of what the sample sizes are.
- 3) The simulation study of the nonlinear ODE model in chapter 5 needs to be extended to appropriately account for the fact that in reality you do not know the value of r and hence need to choose it from all possible values.
- 4) Although the style of the thesis is good, there are a large amount of typos and grammatical errors that need to be corrected. Please proof-read your thesis again and correct any typos or grammatical error. Many are marked by hand in the current version of the thesis and you may come to the department and pick up a hand-corrected thesis as soon as I have prepared this for you incorporating both my and the external's corrections. I will let you know asap by e-mail when this is available.