

Guide to Supplemental Materials

To accompany “Comparison of Blood Flow Models and Acquisitions for Quantitative Myocardial Perfusion Estimation from Dynamic CT” by Bindschadler et al

The supplemental materials for this publication consist of this guide and two JSim project files which implement the models described in the publication in a user-runnable form. To open and run the files, users will need to download and install JSim (freely available at <http://www.physiome.org/jsim>). Some familiarity with JSim will be helpful if users want to use the models to estimate flows from their own data, but even very novice JSim users should find much of the extensively commented model code understandable.

The model in **multipathCT_perfusion_FOR_PUB_FINAL.proj** implements the physiological driving model. “Truth” curves for varying patient characteristics can be obtained by varying the CO (cardiac output) or Fmean (mean tissue blood flow) parameters.

The 4 models in **ModelLibrary_FOR_PUB_FINAL.proj** implement the quantitative flow estimation models. Optimization notes and model specific parameter changes are noted on the project README page.