



CSC Seminar

SPEAKER

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TITLE

Robust model order reduction for drug effect modelling

ABSTRACT

To model the drug effect in a clinical setting, we need simple models with interpretable components, to be able to inform them with clinical data for individual patients. Systems biology models comprise relevant knowledge on the pharmacologic processes, but are too complex to allow for direct parameter estimation. We use model order reduction and simplification methods to construct usable drug effect models from complex nonlinear systems biology models. It is especially important in this application to quantify and accurately predict the interindividual variability in the output. Therefore we need a robust reduction, which we tackle with a sample-based approach.

Tuesday, October 5, 2021 at 2 pm

BBB