Parameter Estimation and Uncertainty Quantification for Dynamical Systems

PROGRAM

Sunday March 5th, 2017

8:00 - 8:45  Registration
8:45 - 8:50  Opening remarks
8:50 - 9:50  **Ralph Smith**  *Uncertainty quantification for physical and biological models*
9:50 - 10:30  **Oksana Chkrebtii**  *Solution uncertainty quantification for differential equations*
10:30 - 11:00  coffee
11:00 - 11:50  **Tim Sauer**  *Data assimilation with and without a model*
11:50 - 12:30  **Brian Hunt**  *State and parameter estimation via an ensemble Kalman filter*
12:30 - 2:00  lunch
2:00 - 2:50  **Daniela Calvetti**  *Uncertainty quantification in flux balance analysis of lumped and distributed models of neuron-astrocyte metabolism*
2:50 - 3:30  **Louis Ellam**  *A statistical model of urban retail structure*
3:30 - 4:00  coffee
4:00 - 4:40  **David Campbell**  *Accounting for the tradeoff in speed vs accuracy in Laplace approximations*
4:40 - 5:20  **Catalin Trenchea**  *Inverse problems matching statistical moments in PDEs with random data*
5:20 - 7:00  Poster Session

Monday, March 6th, 2017

8:30 - 9:00  Registration
9:00 - 9:50  **Youssef Marzouk**  *Coupling probability measures for Bayesian inference*
9:50 - 10:30  **Mette Olufsen**  *The interaction between inflammation and cardiovascular dynamics*
10:30 - 11:00  coffee
11:00 - 11:40  **David Swigon**  *Inverse problem for dynamical systems with uncertain and scarce data*
11:40 - 12:20  **Eberhard Voit**  *Toward unbiased models of metabolism*
12:20 - 2:00  lunch
2:00 - 2:50  **Hulin Wu**  *Statistical methods for bridging experimental data and dynamic models with biomedical applications*
2:50 - 3:30  **Marisa Eisenberg**  *Identifiability and parameter estimation in modeling disease dynamics*
3:30 - 4:00  coffee
4:00 - 4:40  **Satish Iyengar**  *Statistical aspects of integrate-and-fire neuron models*
4:40 - 5:20  Panel Discussion: Open problems and future directions
5:30 - 7:30  Speaker banquet