

Programme – Summer School: Mathematical Modelling for Biologists
Co-organised by SIGNET and CPIB
5-8 September 2011 – University of Nottingham

Monday-Wednesday: lectures will take place in C17, Pope Building (27 on campus map).

Thursday: lectures will take place in A17, Pope Building.

Practicals will take place in rooms A15/A16, Pope Building.

Refreshments for all coffee breaks will be available in A17.

Breakfast will be served in the Hall dining room. Please see the programme for lunch and dinner venues each day.

Monday 5th September - Data, Networks and Models

- 10:00-10:50 Registration and Coffee (*A17, Pope Building*)
- 10:50-11:00 Welcome (Charlie Hodgman) and introduction (Monk / Owen)
- 11:00-12:00 Lecture 1.1: Data, networks and models (Monk)
- 12:00-13:00 Lunch (*Atrium of Mathematical Sciences Building - 20 on campus map*)
- 13:00-14:00 Lecture 1.2: Modelling with differential equations (Owen)
- 14:00-15:00 Practical 1: Analysis of single-variable models.
- 15:00-15:30 Coffee
- 15:30-17:00 Practical (continued)
- 19:00 Buffet Dinner (*Dining Room, Lenton & Wortley Halls*)
- 20:00-23:00 *Lenton & Wortley Hall Bar Lounge will be open*

Tuesday 6th September - Multi-variable models

- 07:30-08:30 Breakfast
- 09:00-10:30 Lecture 2.1: Building multi-variable models (Monk/Owen)
- 10:30-11:00 Coffee
- 11:00-12:30 Lecture 2.2: Analysing multi-variable differential equation models
(Monk/Owen)
- 12:30-13:30 Lunch (*Mathematical Sciences Building - 20 on campus map*)
- 13:30-15:00 Practical 2: Building and simulating multivariable models
- 15:00-15:30 Coffee
- 15:30-17:00 Practical 2 (continued)
- 19:30 Dinner at Mem Saab, Maid Marian Way, City Centre
(transport will be provided)

Wednesday 7th September - Parameter estimation & sensitivity; Stochastic models

07:30-08:30 Breakfast

09:00-10:30 Lecture 3.1: Parameter estimation and sensitivity analysis (Owen)

10:30-11:00 Coffee

11:00-12:30 Practical 3.1: Parameter estimation and sensitivity analysis

12:30-13:30 Lunch (A17)

13:30-15:00 Lecture 3.2: Stochastic models (Monk)

15:00-15:30 Coffee

15:30-17:00 Practical 3.2: Stochastic models

19:00 Dinner (*Dining Room, Lenton & Wortley Halls*)

20:00-23:00 *Lenton & Wortley Hall Bar Lounge will be open*

Thursday 8th September - Day 4: Multicellular modelling

07:30-08:30 Breakfast

09:00-10:30 Lecture 4.1: Spatial models - signalling, transport and growth (Monk/Owen)

10:30-11:00 Coffee

11:00-12:30 Practical 4: Spatial modelling

12:30-13:30 Lunch (A17)

13:30-15:00 Practical 4 (continued)

15:00-16:00 Lecture 4.2: Multiscale models and applications (Owen)

16:00 Coffee and school closes