

ICIC Data Analysis Workshop

Imperial College London

3-6 September 2018

All timings within the workshop are indicative only, and will almost certainly evolve during the workshop. Refer back to the website.

MONDAY 3rd September

1.30-2.00 Registration

2.00 Introduction - Alan Heavens

2.15 Basics of Bayesian Probability theory - Alan Heavens

3.15 Distributions, marginalisation etc – Elena Sellentin

4.00 Coffee

4.30 Exercises

5.30 Check in at Beit Hall

6.00 Drinks and food reception, Blakett Laboratory, Level 8 Common Room, Blakett Lab.

If you cannot enter the building, call Alan Heavens on 07752 848113.

TUESDAY 4th September

9.15 Sampling: rejection; grids – Daniel Mortlock

10.00 How to analyse a problem (Case studies) – Course team; interactive session

11.00 Coffee

11.30 MCMC: Metropolis-Hastings – Daniel Mortlock

12.15 Hands-on: write your own MCMC

1.00 Lunch

2.00 Hands-on MCMC exercise continued

3.30 Convergence tests – Daniel Mortlock

4.00 Coffee

4.30 Hands-on

5.30 Talk by Dr Geraint Harker, VP Research, Winton Capital

6.00 End of session

6.30 Barbecue. Queen's Tower Rooms

WEDNESDAY 5th September

9.15 Gibbs sampling, Hamiltonian MC – Andrew Jaffe

10.00 Hands-on: MCMC/HMC exercise

11.00 Coffee

11.30 Bayesian Hierarchical Models – Alan Heavens

12.15 Hands-on

1.00 Lunch

2.00 Hands-on / exercises

3.00 Model comparison – Roberto Trotta

4.00 Coffee

4.30 Hands-on

5.30 End of session

Free evening

THURSDAY 6th September

9.15 Model Comparison continued – Roberto Trotta

10.15 Hands-on

11.00 Coffee

11.30 Hands-on

12.00 Bayesian vs Frequentist thinking – Elena Sellentin

1.00 Lunch, with a Public Engagement discussion with Roberto Trotta for those interested.

2.00 Hands-on and wrap up

4.00 End of workshop