

Programme for Erasmus IP Seminar
**Mathematical and Computational Models of Perception and Mental
Chronometry**

15-25 April 2006, Biggar, Loaningdale Centre, Scotland-UK

Saturday 15 April Arrival and Introduction

09:00-12:00 Arrival

12:00-14:00 Lunch break

14:00-15:30 Opening session

15:30-16:00 Coffee break

16:00-17:00 Introduction to mathematical models in psychology

17:00-18:30 Dinner break

18:30-19:30 Preparation of student presentations

Sunday 16 April Bayesian Models in Perception (JM Hillis)

09:30-12:00 Statistical decision making

12:00-14:00 Lunch break

14:00-17:00 Optimal cue integration

17:00-18:30 Dinner break

18:30-19:30 Preparation of student presentations

Monday 17 April Bayesian Models in Perception (JM Hillis)

09:30-12:00 Bayesian inference I

12:00-14:00 Lunch break

14:00-17:00 Bayesian inference II

17:00-18:30 Dinner break

18:30-19:30 Preparation of student presentations

20:00-21:00 Gaelic Culture: The Drum Maw Ceilidh Band

Tuesday 18 April Computational Models

09:30-12:00 Binocular 3-D motion perception (JM Harris)

12:00-14:00 Lunch break

14:00-15:30 Disparity encoding and processing (PB Hibbard)

15:30-16:00 Coffee break

16:00-17:00 Analyses of natural images (PB Hibbard)

17:00-18:30 Dinner break

18:30-19:30 Preparation of student presentations

Wednesday 19 April Mental Chronometry (R Ulrich)

09:30-10:30 Introduction to mental chronometry

10:30-12:00 Simultaneous processing model I

12:00-14:00 Lunch break

14:00-15:30 Simultaneous processing model II

15:30-16:00 Coffee break

16:00-17:00 Separate activation models

17:00-18:30 Dinner break

18:30-19:30 Preparation of student presentations

Thursday 20 April Mental Chronometry (R Ulrich)

09:30-10:30 Temporal discrimination and counting models

10:30-12:00 Reaction times and statistical facilitation I

12:00-14:00 Lunch break

14:00-15:30 Reaction times and statistical facilitation II

15:30-16:00 Coffee break

16:00-17:00 Parallel grains model

17:00-18:30 Dinner break
18:30-19:30 Preparation of student presentations

Friday 21 April Bistable Perception (R Goutcher)
09:30-10:30 Perception of bistable images
10:30-12:00 Temporal dynamics
12:00-14:00 Lunch break
15:00 Guided tour of the Scottish Parliament at Holyrood
17:00 Lecture "The Scopes of Vision" (N Wade)
19:00 Dinner at "Suruchi"

Saturday 22 April Psychophysical Models (FA Wichmann)
09:30-10:30 Measurement and psychophysical theory
10:30-12:00 Psychophysical methods
12:00-14:00 Lunch break
14:00-15:30 Psychophysical functions
15:30-16:00 Coffee break
16:00-17:00 Psychometric functions
17:00-18:30 Dinner break
18:30-19:30 Preparation of student presentations/Business Meeting

Sunday 23 April Psychophysical Models (FA Wichmann)
09:30-10:30 Fitting and sampling
10:30-12:00 Goodness-of-fit
12:00-14:00 Lunch break
14:00-15:30 Bootstrapping and confidence intervals
15:30-16:00 Coffee break
16:00-17:00 Bayesian inference for psychometric functions
17:00-18:30 Dinner break
18:30-19:30 Student presentations

Monday 24 April Optimal Noise Levels for Visual Detection (R Goris)
09:30-12:00 Student presentations
12:00-14:00 Lunch break
14:00-17:00 Optimal noise levels for visual detection
17:00-18:30 Dinner break
18:30-19:30 Student presentations
20:00 (open ended) Farewell party

Tuesday 25 April Student Presentations and Departure
09:30-12:00 Student presentations
12:00-14:00 Lunch break
14:00-18:00 Departure