## Paper for 3. APTS year 8 (2014–15): Summary report to Advisory Committee

## Preliminary: some summary counts for all seven years 2007–2015

Numbers of students who took at least one APTS week (of which, EPSRC-funded in brackets):

```
2007-08
           2008-09
                      2009-10
                                 2010-11
                                            2011-12
                                                       2012-13
                                                                  2013-14
                                                                             2014-15
88 (38)
                      100 (45)
           88 (37)
                                 90 (37)
                                            128 (46)
                                                       129 (40)
                                                                 147 (40)
                                                                            149 (42)
```

Number of APTS lecturers to date: 22 (This will increase to 23 in 2015–16)

Number of APTS-week host institutions to date: 10

#### Member Institutions

In 2014-15 there were 24 MIs, all located in the UK and Ireland.

#### APTS weeks, academic year 2014–15

Week 1, December 2014, Cambridge:

- Statistical Computing (Finn Lindgren)
- Statistical Inference (Jonty Rougier)
- Evening sessions: RSS Reception, JMP presentation, Pub quiz, Making a life, Academy Dinner

Week 2, Marchl 2015, Southampton:

- Statistical Modelling (Antony Overstall and Dave Woods)
- Statistical Asymptotics (Andrew Wood)
- Evening sessions: RSS Reception, Statistics and Probability at Large, Pub Quiz, Academy Dinner

Week 3, July 2015, Warwick

- Applied Stochastic Processes (Stephen Connor)
- Computer Intensive Statistics (Adam Johansen)
- Evening sessions: RSS Reception, Pub Quiz, Academy Dinner

Week 4, August/September 2015, Glasgow:

- Survival Analysis (Ingrid Van Keilegom)
- Nonparametric Smoothing (Adrian Bowman and Ludger Evers)
- Evening sessions: RSS Reception, Ceilidh

### Registrations

A total of 151 unique students were registered to attend one or more APTS week in 2014/15. Numbers of registrations for each of the four weeks were 118, 103, 105 and 79, respectively. The corresponding attendance figures were 117, 99, 95 and 77, respectively. At the end of the registration period, we were able to accommodate all students.

Of those 151 students:

• 57 were registered to attend all 4 weeks and 52 students actually did so.

- ullet 137 were first year students in statistics or probability, of whom 41 were EPSRC funded.
- APTS Member Institutions supplied 110 of the 151 applications.



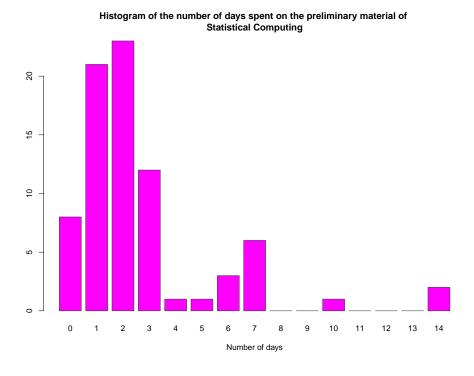
Figure 1: UK 2014/15 Registrations

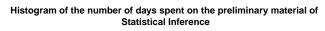
## Student feedback

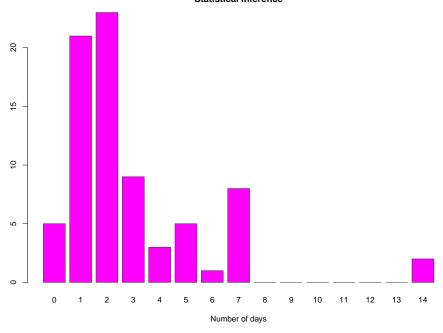
The following summarizes student responses to an anonymous questionnaire completed at the end of each training week.

## A. Preparation for APTS

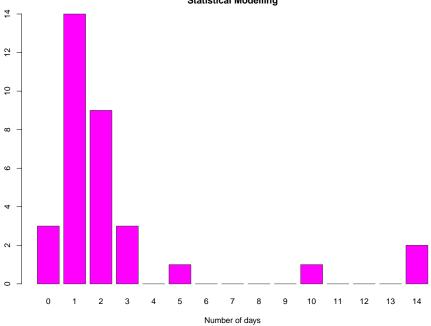
1. Roughly, how many days did you spend on the preliminary material?



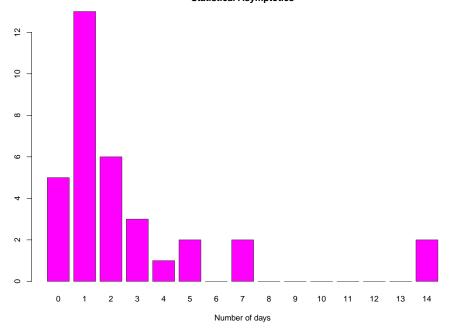




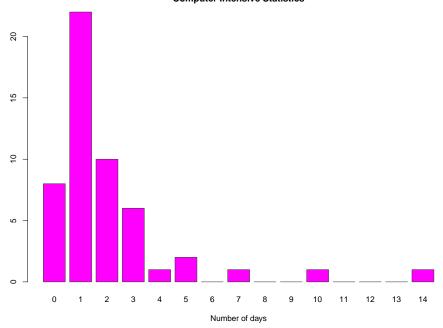
# Histogram of the number of days spent on the preliminary material of Statistical Modelling

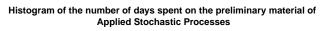


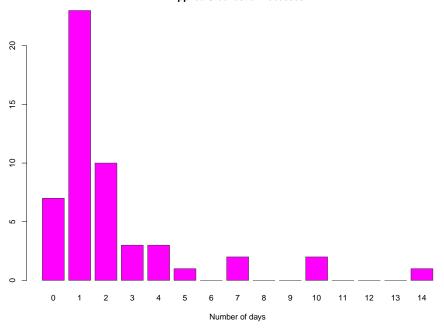
# Histogram of the number of days spent on the preliminary material of Statistical Asymptotics



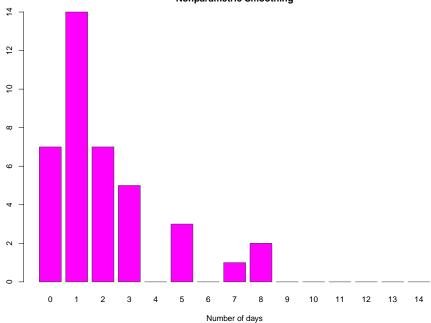
# Histogram of the number of days spent on the preliminary material of Computer Intensive Statistics



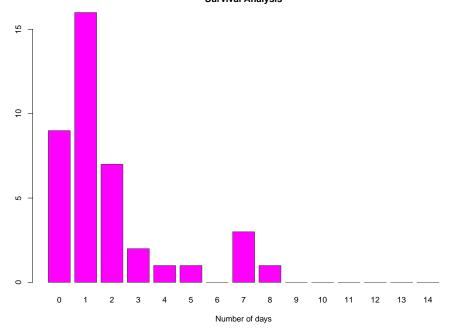




# Histogram of the number of days spent on the preliminary material of Nonparametric Smoothing



Histogram of the number of days spent on the preliminary material of Survival Analysis



2. Did the preliminary material help you to understand the lectures this week?

	Yes	No	Didn't use
Statistical Computing	70	1	7
Statistical Inference	71	1	6
Statistical Asymptotics	23	2	9
Statistical Modelling	26	0	8
Computer Intensive	38	1	12
Stochastic Processes	41	1	10
Nonparametric Smoothing	32	0	8
Survival Analysis	31	0	9

## B. The APTS week: material covered

1. How would you rate the level of the module lectures?

	Too easy	Just right	Too hard
Statistical Computing	10	63	6
Statistical Inference	4	61	13
Statistical Asymptotics	0	15	19
Statistical Modelling	2	31	1
Computer Intensive	5	36	9
Stochastic Processes	1	44	7
Nonparametric Smoothing	2	33	6
Survival Analyis	8	27	5

2. Did the Oxford R lectures help you with the computer sessions during the week?

	Yes	No	Didn't use
Week 1	27	1	50
Week 2	6	0	28
Week 3	10	2	40
Week $4$	11	1	28

 $3.\ \mathrm{Did}$  you find the computer sessions/classes helpful?

	Yes	No	Didn't attend
Statistical Computing	62	12	5
Statistical Modelling	24	9	1
Computer Intensive	35	6	10
Stochastic Process	26	4	21
Nonparametric Smoothing	34	3	3
Survival Analysis	30	5	6

4. Did you bring a laptop to the computer sessions?

	Yes	No	
Week 1	71	5	
Week $2$	28	4	
Week 3	39	8	

## Student costs 2014-15

The following table summarizes the invoices received by APTS sending institutions for the four APTS weeks.

APTS week	Registration	Accommodation	EPSRC travel
	fees	and food	allowance
Cambridge	£15,930	£30,135	(£1,003)
Southampton	£13,905	£22,680	(£903)
Warwick	£14,175	£27,445	(£897)
Glasgow	£5,157	£21,240	(£1,002)
TOTAL	£49,167	£101,500	(£3,805)

Note:

Registration fee discounts for students attending all four weeks are all deducted from the final week.

### Summary of APTS Alumni Questionnaire Responses (2010/11 Cohort)

1. What best describes your current status?

```
other (please specify): 4
still studying for PhD: 6
working in academia as statistical scientist: 14
working in academia in another role: 1
working in industry as statistical scientist: 3
working in industry in another role: 2

Of those answering other:

Finished PhD, Jobseeking
Having a break between PhD and work
job hunting
waiting for viva
```

2. Which of the APTS weeks did you attend in 2010/11? (specify as many as is appropriate)\*

```
Statistical Computing & Statistical Inference: 25
Statistical Modelling & Statistical Asymptotics: 24
Applied Stochastic Processes & Computer Intensive Statistics: 17
Spatial and Longitudinal Data Analysis & Nonparametric Smoothing: 23
```

3. Which of the APTS modules ended up connected closely to your eventual PhD research? (specify as many as is appropriate)

```
Applied Stochastic Processes: 1
Computer Intensive Statistics: 5
Nonparametric Smoothing: 7
Spatial and Longitudinal Data Analysis: 10
Statistical Asymptotics: 7
Statistical Computing: 15
Statistical Inference: 11
Statistical Modelling: 12
```

4. Has the training given by APTS proved helpful to you in your PhD experience and research?

```
Yes 28 (93%) No 2 (7%)
```

5. Has the training given by APTS proved helpful to you in your present employment? (answer only if you are not still working for your PhD)

```
Yes 15 (68%) No 7 (32%)
```

6. If your answer to either of the previous two questions was yes, which of the following reasons underlie your recommendation? (specify as many as is appropriate)

```
APTS weeks enable broader contacts with more senior academics: 6 APTS weeks enable networking with peers: 15
The modules provide a broad general training in the area: 22
```

Further details supplied by those answering other:

7. Which of the APTS modules ended up connected closely to your current employment? (specify as many as is appropriate, answer only if you are not still working for your PhD)

```
Computer Intensive Statistics: 4
Nonparametric Smoothing: 3
Spatial and Longitudinal Data Analysis: 5
Statistical Asymptotics: 2
Statistical Computing: 8
Statistical Inference: 6
Statistical Modelling: 10
```

8. Would you recommend APTS to someone just starting a PhD in applied probability or statistics?\*

```
Yes 30 (100%) No 0 (0%)
```

#### Additional Notes

- 1. Current status of those who would not recommend APTS:
  - : NA
- 2. Current status of those who did not find APTS useful for their PhD:

```
working in academia as statistical scientist: 1 working in industry as statistical scientist: 1
```

Warwick, November 28, 2014

# **Registration for APTS**

WARWICK

Student registration for APTS academic year 2015-16 will open on Friday 25th September 2015, and **closes on Friday 30th October 2015**. Registration applications made after that date will be kept in a priority-ordered reserve list, in case of any cancellations.

Students can only be registered for APTS weeks by their "sending institution" (i.e., their home department): a list of these institutions appears below.

- If your department wishes to register as a sending institution, then please click here;
- If your department wishes to commit to being a full Member Institution of APTS, then please <u>click</u> <u>here</u>.

(All Member Institutions are automatically "sending institutions".)

If your department is included in the list below, the APTS contact (who must be a member of academic staff employed by that institution) will be provided with a password enabling him/her to complete the <u>student registration form</u> for 2015-16 APTS weeks. (The student registration form also gives full information on cost.)

The principles and practicalities of student registration and payments include:

- date of application within the registration period is unimportant --- it is not used in determining the allocation of APTS places to students (see the APTS <u>Constitution</u> for the list of priorities)
- sending institutions are invoiced by APTS for the registration fee, and for accommodation/meal costs, of their students who are allocated APTS places
- for EPSRC-funded students taking an APTS week away from home, an allowance is made by APTS to the sending institution towards the cost of travel
- in the case of a student taking all four APTS weeks in the same academic year a 20% rebate of registration fees (20% of 4 x £135) is made
- all financial transactions with individual APTS students, including those relating to travel expenses, are handled by the sending institution

Please see the <u>FAQ</u> and the <u>Billing and Cancellation policy</u> for more specific information and the <u>list of prerequisites</u> if you are in any doubt as to whether APTS would be suitable for a particular student.

### **List of sending institutions**

Aston University: Mathematics Group

Brunel University: Department of Mathematics

Cardiff University: School of Mathematics

Durham University: Dept of Mathematical Sciences

### **APTS** contact

David Saad
Dr Silvia Liverani
Anatoly Zhigljavsky
Jochen Einbeck

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#### APTS: Student registration

Government Communications HQ

Heriot-Watt University: Dept of Actuarial Maths and Statistics George Streftaris

Imperial College London: Business School

King's College London: Department of Biostatistics at the Institute of

**Psychiatry** 

Lancaster University: Dept of Maths and Statistics Kanchan Mukherjee Lancaster University: School of Health and Medicine Benjamin Taylor London School of Hygiene and Tropical Medicine James Carpenter

Newcastle University: Dept of Mathematics and Statistics

Nottingham Trent University: Department of Mathematics and Statistics Golnaz Shahtahmassebi

NUI Galway: Dept of Mathematics NUI Maynooth: Dept of Mathematics

Open University: Dept of Mathematics and Statistics

Trinity College Dublin: Statistics Group Umeå University: Department of Statistics University College Cork: Statistics Department

University College Dublin: Statistics Group

University College London: Dept of Infection and Population Health

University College London: Dept of Statistical Science University College London: Institute of Child Health

University of Aberdeen: Department of Medical Sciences University of Bath: Dept of Mathematical Sciences

University of Birmingham: School of Mathematics

University of Bristol: Dept of Mathematics-Statistics Group

University of Bristol: Dept of Social Medicine

University of Cambridge: CRI

University of Cambridge: MRC Biostatistics Unit

University of Cambridge: MRC Human Nutrition Research

University of Cambridge: Statistical Laboratory

University of East Anglia: School of Computer Science

University of Edinburgh: Centre for Population Health Sciences

University of Edinburgh: Roslin Institute

University of Edinburgh: School of Mathematics University of Essex: Department of Mathematical Sciences

University of Exeter: College of Eng Maths and Phys Sci

University of Glasgow: Statistics

University of Iceland: Dept of Mathematics

University of Kent: IMSAS

University of Leeds: Dept of Statistics

Andrew Pickles

Walter Distaso

Jeremy Bradley

Colin Gillespie

John Newell Caroline Brophy Paul Garthwaite Simon Wilson

Dr Magnus Ekström

David Hawe

Brendan Murphy Andrew Copas Paul Northrop

Mario Cortina-Borja

Ian Stansfield Simon Wood

Biman Chakraborty

Jonty Rougier Chris Metcalfe Simon Tavare

Ian White

Ivonne Solis-Trapala

Rajen Shah Elena Kulinskaya

Chris Weir

Mark Bronsvoort

Natalia Bochkina Berthold Lausen

Chris Ferro Duncan Lee

Gunnar Stefansson

1im Griffin Stuart Barber

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#### APTS: Student registration

University of Leeds: Institute of Clinical Trials Research

University of Limerick: Dept of Mathematics and Statistics

Peg Hanrahan

University of Liverpool: Department of Molecular and Clinical Cancer Medicine Trevor Cox University of Liverpool: Dept of Mathematical Sciences Kai Liu University of Manchester: School of Mathematics Peter Foste

University of Nottingham: Nottingham Geospatial Institute

University of Nottingham: School of Mathematical Sciences

Chris Brignell

University of Oxford: Dept of Physics University of Oxford: Dept of Statistics

University of Oxford: Wellcome Trust Centre for Human Genetics
University of Plymouth: School of Computing and Mathematics
University of Reading: Department of Mathematics and Statistics

University of Salford: Centre for OR and Applied Statistics
University of Sheffield: Dept of Probability and Statistics
University of Sheffield: School of Health and Related Research

University of Southampton: Department of Ocean and Earth Science

University of Southampton: School of Mathematics
University of Southampton: School of Social Sciences
University of St Andrews: School of Maths and Statistics

University of Surrey: Dept of Mathematics
University of Warwick: Complexity Science DTC

University of Warwick: Dept of Statistics University of Warwick: MASDOC DTC University of Warwick: Medical School

University of Warwick: MOAC Doctoral Training Centre

University of Warwick: Systems Biology DTC

University of Wolverhampton: School of Technology
University of York: Centre for Reviews and Dissemination

University of York: Department of Mathematics

apts.ac.uk

Contact APTS

Trevor Cox
Kai Liu
Peter Foster
Jeremy Morley
Chris Brignell
Nick Jones
Geoff Nicholls
Gil McVean
Julian Stander
Dr Fazil Baksh
Phil Scarf
Tim Heaton
Stephen Walters
Claudie Beaulieu
Robin Mitra
Peter Smith
Carl Donovan
Janet Godolphin
Ben Graham

Barbel Finkenstadt Andreas Dedner Nigel Stallard

Dr Hugo van den Berg

Vicky Buchanan-

Wollaston Diwei Zhou Mark Simmonds Stephen Connor

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Intranet Contact APTS

Page contact: Benjamin Graham Last revised: Mon 14 Sep 2015

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# **Billing and cancellation**

WARWICK

This page gives details of the way in which the accounts of sending institutions will be handled, and of the APTS cancellation policy.

# **Billing**

APTS will maintain an account for each sending institution. Charges made against this account will be:

- registration fee for all students
- cost of the specified accommodation and food requirements

For students who participate in all four APTS weeks in the same academic year, 20% of the total registation fees will be rebated. This is achieved by reducing the registation fee on the final invoice from £135 to £27.

Invoices will be issued to sending institutions **at the end of each APTS week**, for the amounts relating to participation in that APTS week. Registration rebates for students attending all four weeks are made on the invoice for APTS week 4.

# **Cancellation policy**

- 1. Registration fees are payable for all students accepted for an APTS week, and are not normally refunded in the event of cancellation.
- 2. In the event of cancellation of a student's participation in an APTS week, the charges made for accommodation and food will be reduced by
  - 100% if the cancellation is received before noon of the Monday six weeks prior to the Monday of APTS week
  - 50% if the cancellation is received after that but before noon of the Monday four weeks prior to the Monday of APTS week.

(For an APTS week starting on Tuesday or Wednesday, "the Monday of APTS week" means the preceding Monday.) After four weeks prior to an APTS week, charges relating to that APTS week are not normally refunded.

Notice of any cancellation should be sent (by the APTS Academic Contact for the student's home department, NOT by the student concerned) by email to <a href="mailto:admin@apts.ac.uk">admin@apts.ac.uk</a>.

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Intranet Contact APTS

Page contact: Benjamin Graham Last revised: Fri 11 Sep 2015

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