2012 ANNUAL REPORT COVER SHEET

for

UNITS, CENTRES & INSTITUTES

Name of Unit, Centre or Institute:
Centre for Mathematical Social Sciences

Name of Director/s:
Patrick Girard

Attach:  Annual Report 2012 ☐
Financial Statement 2012 ☐

Signed by:

(Director)
Date 11/07/13

............................... (Dean)
Date .......................
RESEARCH UNITS, CENTRES AND INSTITUTES

Annual Report Template

Please refer to the University of Auckland Policy on Research Units, Centres and Institutes for more information on reporting and accountability requirements (clause 2.5). A copy of this policy is available from:

Section 1a - IDENTIFICATION INFORMATION:

| Title of Unit, Centre or Institute: | Centre for Mathematical Social Sciences |
| Name of Director: | Dr Patrick Girard |
| Name of Deputy Director: | Dr Mar C. Wilson; A/Prof Arkadii Slinko |

Section 1b – ENDORSEMENT OF REPORT:

| Signatures: | Please sign in appropriate space below |
| Director | (Required for all Units/Centres/Institutes) |
| Head of Department | (Required only for Department Units/Centres) |
| Dean | (Required for Faculty/University Centres/Institutes) |

Section 2 – ADVISORY BOARDS AND MEETING DATES:

| Names of Advisory Board members (for Faculty Centres and University Centres and Institutes) | N/A |
| Names of Management Committee Members (for University Centres and Institutes) | N/A |
| Dates of the meetings of the advisory board and management | N/A |
Section 3 – PARTICIPATING MEMBERS AND EMPLOYEES/STUDENTS:

Names and Departments of participating members

Dr Patrick Girard, Dr Mark Wilson, A/Prof Arkadii Slinko, A/Prof Matthew Ryan, A/Prof John Hillas, Dr Simona Fabrizi (Massey University, Albany), Dr Jeremy Seligman, Dr Geoffrey Pritchard, Dr Fernando Beltran, Dr Valery Pavlov, Dr Tan Lee

List names, positions, and FTEs of all staff employed and postgraduate students involved in the Unit, Centre or Institute

Ali Hameed (PhD, A. Slinko), Nina Anchugina (PhD, A. Slinko), Shau Girard, Antonia Chen (PhD, M. Ryan), Addison Pan (PhD, S. Fabrizi/M.Ryan)

Section 4 – INTRODUCTION:

Provide here a brief introduction to the report (maximum of 300 words)

The centre’s third year of existence was productive. Members worked closely on grant applications, workshop organisations and publications.

Section 5 – AIMS, GOALS AND FUTURE PLANS:

a. General Aims: Briefly describe the general aims (plans and objectives/goals) of the Unit, Centre or Institute. Identify how they address the University and Faculty Strategic Plan.

The Centre for Mathematical Social Sciences is a group of researchers interested in applying mathematical and computational modelling to social sciences (particularly politics and economics), based at the University of Auckland. The central topic is mathematics of collective decisions made by a group of self-motivated agents.

The main goals of the centre are to serve as a focal point for seminars, workshops and other research collaboration, for postgraduate student training, and for public outreach. They obviously relate strongly to Objectives 1,3,4,5,6,11 of the UoA Strategic Plan 2005-2012, and to points 2,6,10 of the FoS Strategic Plan 2010-2015.

b. Goals for Reporting Year: Describe the specific goals for the reporting year.

Increase profile of CMSS at UoA and more widely; increase links with similar overseas centres; obtain more secure funding.

c. Plans for Upcoming Year: Outline the plans for the next year. Identify any resource needed.

Regular seminars, organising 5th centre’s summer workshop, recruit more members and students, and secure funding for the various activities.
Section 6 – MAJOR ACHIEVEMENTS AND OTHER NOTABLE ACTIVITIES:

<table>
<thead>
<tr>
<th>Report against the specific goals listed in 5b above</th>
<th>Mark Wilson’s work on MMP reform found its way into the final report. Funding acquired to secure participation of international speakers at the workshops listed below increase our links/profile. We have reached out to Massey and EPOC to co-organise the 4th CMSS summer workshop. We have new joint supervision, between members of the centre and Massey. We have secured funding for our activities, although we couldn’t find more stable funding for future activity. In that respect, the demise of the CFRIF in 2013 and how the proposed changes to inter-disciplinary funding are unhelpful to us. Reyhaneh Reyhani (supervised by Mark Wilson, official co-supervisor Geoff Pritchard) completed her PhD in early 2013.</th>
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<tbody>
<tr>
<td>Summary of major developments and achievements. Identify how these activities contribute to the research capability of the department or faculty (beyond what would be achieved through the activities of the individual members). Please provide greater detail for anything noteworthy that may give useful publicity to the University</td>
<td>• 4th CMSS Summer Workshop Theme: Mathematical Economics March 21-22. ~30 participants. Special guess (DVA): Clemens Puppe • Workshop on Epistemic Game Theory February 17-18, 2013. ~20 Patricipants. Special guess (DVA): Dov Samet</td>
</tr>
<tr>
<td>Comment on any cooperative commercial activities, research with other University or Government laboratories or research groups</td>
<td>N/A</td>
</tr>
<tr>
<td>Comment on any courses given or workshops and seminars held</td>
<td>The centre held regular seminars at the university, with presentations from members of the center, invited speakers from New Zealand and international visitors. For further details of activity, please consult the center’s website: <a href="http://cmss.auckland.ac.nz/">http://cmss.auckland.ac.nz/</a></td>
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### Section 7 - Reviews

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<th>Date of last review</th>
<th>N/A</th>
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**Review Recommendations**
List the recommendations of the review and give an update of progress on addressing the recommendations.

### Section 8 – FINANCIAL REPORT

<table>
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<th>State whether the Unit, Centre or Institute has its own Activity Centre/s and list the Activity Centre/s being used</th>
<th>N/A</th>
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</table>

State sources of funding, for example, from research funds from outside bodies, from the Department or Faculty, or other

- 2 distinguished visitor awards, for Clemens Puppe and Dov Samet.
- Contributions from the members’s departments.
- PBRF allocations.
- Funding from ATE research network for the summer workshop.

List any significant resource allocation decisions taken by the Advisory Board during this reporting year (if applicable)

Include a statement of financial performance (contact Faculty Accountant for assistance), or give a clear explanation of the reasons if there has been no financial activity

### Section 9 – RESEARCH OUTPUTS

| Include a list of publications and Arkadii Slinko |
|-------------------------------------------------|-----------------------------------------------|
| Journal - Research Article                     |
Order, Online First. doi:10.1007/s11083-012-9274-0.

Conference - Proceedings

Conference - Conference Paper

Other stuff
Invitation-only Dagstuhl Seminars in Schloss Dagstuhl (Germany) (4 March - 9 March 2012). This was my fourth invitation to Dagstuhl.

Invited fully funded plenary speaker at:
7th Pan-Pacific Game Theory Conference, Adelaide, Australia, 21-24 February 2013;
Invited semi-funded speaker at:
Program Committee Member of the 13th ACM Conference on Electronic Commerce, June 4-8, 2012, Valencia, SPAIN (colocated with AAMAS).
Program Committee Member of the 11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS-12). 4-8 June, 2012. Valencia, SPAIN.
Program Committee Member of the Twenty-Sixth Conference on Artificial Intelligence (AAAI 2012). 22-26 July, 2012. Toronto. CANADA.

PhD students:
1. Gvozdeva Tatyana (obtained her PhD in May 2012.
3. Shaun White - successfully completed his provisional year.

Matthew Ryan

Journal - Research Article


Conference - Conference Paper


Invited Research Paper in Workshops/Conferences

“Default and Renegotiation in PPP Tenders” (with Flavio Menezes), Association for Public Economic Theory (APET) Workshop (Brisbane, 25-26 June)

“Default and Renegotiation in PPP Tenders” (with Flavio Menezes), Society for the Advancement of Economic Theory (SAET) Conference (Brisbane, 30 June – 2 July)

“Default and Renegotiation in PPP Tenders” (with Flavio Menezes), VUW Microeconomics Workshop (Wellington, 2 November)

Invited Seminar

“Ambiguity Aversion, Innovation and Investment Bubbles“ (with Luca Rigotti and Rhema Vaithianathan), University of Otago (20 April)

Research Visit

University of Queensland (March, 2012)

Research Supervision

Harshal Chitale (PhD; due to submit in 2014)
Antonia Hao Chen (PhD; due to submit in 2015)

Refereeing activities


Other
Successful DVA Grant (PI = Arkadii; AI = myself) to fund Clemens Puppe’s trip to Auckland in February/March 2013 ($6500)

Session organiser, SAET Conference (Brisbane, 30 June – 2 July)

Mark C. Wilson

2012 Research and Creative Works

Book - Monograph

Conference - Proceedings

Journal - Research Article

Other - Oral Presentation

Patrick Girard

Chapter

Conference – Oral Presentation
Girard, P. (2012). Logical dynamics of belief change in the community. Department of Philosophy, invited speaker, Regensburg, Germany.

Supervision:
Shaun White (with Arakadii Slinko).
Liang Zhen (with Jeremy Seligman).

Simona Fabrizi

Journal - Research Article
Fabrizi, S., & Lippert, S. (2012). Due diligence, research joint ventures, and incentives to innovate. Journal of Institutional and Theoretical
Economics, 168(4), 588-611.  
DOI: http://dx.doi.org/10.1628/093245612804469764

Conference - Conference Paper  


Invited Research Paper in Workshops/Conferences  

Invited Seminar  


Research Visit
Ecole Polytechnique, France: Invite Prof. Francis Bloch.
University of Macerata, Italy: Invite A/Prof Federico Boffa.

Research Supervision
Lowis Seikowsky, Master of Industrial Engineering, Massey U/KIT (joint with Clemens Puppe).

Refereeing activities
Ad-hoc referee for Economic Modelling and Journal of Industrial Economics.


Other
September 2012-ongoing, Founding member of the newly established ‘Research Network in Applied and Theoretical Economics (ATE),’ hosted and administered at Massey U, School of Economics and Finance.

Please forward your report to your Head of Department or Faculty Office for endorsement (Section 1B above). Note: Annual Reports to be submitted to Research Committee must reach the Research Office by 28 February.