

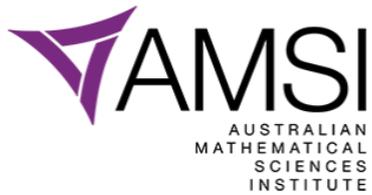
The background features a complex network of white lines connecting small square nodes. Scattered throughout this network are various white icons representing different fields: a medical bag with a cross, a truck, a bar chart with an upward arrow, a train, a globe with a shield, a dollar sign with a bar chart, a fire, a tree, and a bus.

AMSI
OPTIMISE
MATHEMATICAL INNOVATION

THE UNIVERSITY OF MELBOURNE
18-22 JUNE

EVENT REPORT

Thank you to the following **AMSI Optimise 2018** sponsors:



AMSI Optimise 2018

Symposium Inspiring Industry and Research Collaboration

The University of Melbourne | 18-22 June 2018

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FOREWORD

Optimisation is an increasingly crucial field for industry to drive growth and profitability. AMSI Optimise, the Australian Mathematical Sciences Institute's (AMSI) newest flagship networking and research training event, was launched in 2017 to strengthen mathematical optimisation research collaboration and its applications across industry. As one of five premier flagship events hosted each year around Australia it forms part of the Securing Australia's Mathematical Workforce: 2016-2020 agreement between AMSI and the Department of Education and Training.

“AMSI Optimise offers a unique space for researchers and industry to explore opportunities to drive cutting-edge collaborations”

Professor Geoff Prince
AMSI Director

Comprising a three-day industry-focused conference followed by a two-day research workshop, the event brings together people from the diverse companies and research disciplines that use and develop optimisation models and software. It provides a platform for research training and developing new collaborations in this vital area through PhD internships, research partnerships and postgraduate research projects.

AMSI Optimise 2018 was jointly funded by the Australian Mathematical Sciences Institute and the Australian Government's Department of Education and Training, with support from The University of Melbourne, ACEMS, Biarri, BHP Billiton Foundation through the AMSI CHOOSEMATHS program and APR.Intern.

DIRECTOR'S REPORT



Dr Alysson M. Costa
The University of Melbourne

AMSI Optimise is a new annual event aimed at bringing together academics, students and practitioners in Optimisation. Both in 2017 (first edition of the event) and in 2018, the meeting was structured around several different activities, designed to meet the diverse needs of the audience. In 2018, we had international and national plenary speakers, contributed talks, short practice courses (hands-on), panel discussions and a poster session, on top of the social and networking activities.

The themes of AMSI Optimise 2018 were “Optimisation Under Risk” and “Humanitarian Applications of Optimisation”. The invited international speakers were selected with these topics in mind. Professor Terry Rockafeller (University of Washington) presented two talks focusing on optimisation under uncertainty, while Associate Professor Marie-Ève Rancourt (HEC Montréal) presented two talks on her work on logistics problems related to relief operations, food security and healthcare delivery in developing countries. Finally, Associate Professor Maria Antónia Carravilla (University of Porto) presented a review of industry/academia collaboration between her research group and several industries in both the private and public sector.

The remaining invited talks also focused on one of the two themes (or in both). AMSI Optimise had speakers from both academia and industry, including organisations such as the Country Fire Association, Victoria Police Force, Reserve Bank of Australia, Defence Science and Technology Group, Centre for Disaster Management and Public Safety, among others. Companies such as Opturion and Biarri Mathematics were also represented by invited speakers. These talks were complemented by the “Workshop” part of the conference, where researchers from various universities across Australia presented their current investigations.

Two short practice courses (hands-on) on Integer Programming and Influence Charts, and a case study from the health industry, were also on the program. This was complemented by two panel discussions. The first dealt with interactions between academics and practitioners in the humanitarian sector while the second discussed the participation of women in optimisation. This last panel was very popular among the audience and was covered in the general press. Alison Harcourt, one of the panellists, was later offered an honoris causa doctorate from The University of Melbourne and became 2019 Victorian Senior Australian of the Year.

As per the feedback received, students, academics and practitioners were able to find activities that matched their expectations and areas of interest. I believe that this is an

indication that the format proposed in 2017 is reaching a somewhat mature state after only two editions of the event.

In a more personal observation, I am pleased to report that the atmosphere in the conference was both relaxed and productive. Participant interaction was high, both during informal events and during the talks, raising fruitful discussions and ideas for collaborations. I thank Chloe Pearse and Angela Coughlin for their hard work on co-organising this event.

Overall, I believe that the main goal of bringing together people interested in Optimisation from different backgrounds was fully attained. As the event starts to consolidate itself in the Australian calendar, our expectation is that AMSI Optimise will continue to provide a meeting venue for the national optimisation community.

PROGRAM

MONDAY 18 JUNE

Day 1—Optimisation Under Risk

Decision Making Under Uncertainty
Finance and Risk Management

TUESDAY 19 JUNE

Day 2—Disaster Management

Humanitarian Applications
Emergency Management and Public Safety

WEDNESDAY 20 JUNE

Day 3—Optimisation Practice

Optimisation Applications
Women in Optimisation

THURSDAY 21 JUNE

Day 4—Research Workshop

Optimisation Under Uncertainty
Continuous Optimisation
Healthcare Applications
Transportation and Logistics

FRIDAY 22 JUNE

Day 5—Research Workshop

Disaster Management
Continuous Optimisation
Optimisation Applications

SPEAKERS

International Speakers

SPEAKER	TITLE	ORGANISATION
Associate Professor Maria Antónia Carravilla	OR Inside Influence charts (hands-on session) Women in optimisation (panel)	Universidade do Porto, Portugal
Associate Professor Marie-Ève Rancourt	Applied network design problems to support humanitarian operations Tactical network planning for food aid distribution in Kenya Women in optimisation (panel)	HEC Montréal, Canada
Professor Emeritus R. Tyrrell Rockafellar	Risk and reliability in optimisation under uncertainty Progressive hedging in nonconvex stochastic optimisation	University of Washington, USA



“Hearing the stories from Marie-Ève and her engagement with UN was absolutely fantastic.”

Hamideh Anjomshoa
IBM Research

SPEAKERS

National Speakers

SPEAKER	TITLE	ORGANISATION
Paul Barnard	Disaster management and public safety (panel)	The University of Melbourne
Craig Brownlie	Burning down stereotypes	Country Fire Association
Pedro B. Castellucci and Dr Alysson M. Costa	Solving a logistics distribution problem using mixed-integer programming and matheuristics (hands-on session)	The University of Melbourne
Alan Dormer	Plan, react, repeat (industry challenge)	Opturion
Dr Simon Dunstall	Optimisation and quantitative risk opportunities in preparedness, mitigation and emergency management	CSIRO Data61
Professor Greg Foliente	Black swans and perfect storms: challenges in disaster management and resilience research Disaster management and public safety (panel)	Centre for Disaster Management and Public Safety
Joes Forbes	Business breakfast opening remarks	Biarri
Ged Griffin	Critical incidents and next generation public safety Disaster management and public safety (panel)	Victoria Police Centre for Disaster Management and Public Safety
Alison Harcourt	Women in optimisation (panel)	The University of Melbourne
Professor Gregoire Loeper	Reconstruction of missing data by optimal transport: applications in finance	Centre for Quantitative Finance and Investment Strategies, Monash University
Dr Vicky Mak-Hau	Redesigning medical wards by optimally allocating specialties to minimise outliers (case study)	Deakin University
Dr Gabriela Nodari	Uncertainty and monetary policy in good and bad times	Reserve Bank of Australia
Dr Darryn Reid	Predictability and its discontents	Defence Science and Technology Group
Professor Kate Smith-Miles	Optimisation in the darkness of uncertainty: when you don't know what you don't know, and what you do know isn't much! Women in optimisation (panel)	The University of Melbourne
Steve Tsikaris	Disaster management and public safety (panel)	Department of Treasury and Finance
David Williams	Disaster management and public safety (panel)	Centre for Disaster Management and Public Safety

WORKSHOP TALKS

SPEAKER	TITLE	ORGANISATION
Mesias Alfeus	On numerical methods for spread options	University of Technology Sydney
Dr Gleb Belov	Process plant layout optimisation: equipment allocation	Monash University
Dr Geoffrey Brent	Quantifying expert judgement in an objective function for table-balancing	Australian Bureau of Statistics
Associate Professor Regina Burachik	Sparsity optimisation for a network of coupled oscillators	University of South Australia
Pamela Cortez	Post-disaster humanitarian logistics	Universidade Estadual de Feira de Santana, The University of Melbourne
Dr Michelle Dunbar	Mathematics in medicine: optimising image acquisition and cancer treatment in radiotherapy	The University of Sydney
Professor Andrew Eberhard	A fixed-point operator in discrete optimisation duality	RMIT
Chaojie (Jasmine) Guo	An algorithm for the network flow problem with multi-transport modes and time window constraints	The University of Melbourne
David Hemmi	Recursive evaluate and cut	Monash University and Data61
Arash Kaviani	Optimising the resilience of road networks under uncertainty	The University of Melbourne
Dr Yalçın Kaya	Optimal control of a UAV in search-and-rescue operations	University of South Australia



12 female speakers

“I think the conference did a good job finding relevant representatives of the Operations Research community, capable of offering a wide variety of topics in a compelling way.”

Alvaro Flores
CSIRO / Data61

SPEAKER	TITLE	ORGANISATION
Professor Christopher M Kellett	Optimal control for computing carbon prices	The University of Newcastle
Dr Philip Kilby	Efficient computation of cost allocations for the Vehicle Routing Problem	CSIRO Data61
David Kirszenblat	Using column generation to solve an aircrew training timetabling problem	The University of Melbourne
Associate Professor Alexander Kruger	About stability of error bounds	Federation University Australia
Scott Lindstrom	Douglas-Rachford method: a view from strongly quasi-nonexpansive operators	CARMA, The University of Newcastle
Jose Nicolas Melchor Gutierrez	A comparison of nonlinear, second order cone and linear programming formulations for the optimal power flow problem	São Paulo State University and The University of Melbourne
Andrew Perryman	Augmented benders' decomposition for synchromodal logistics	Monash University
Dr Moshe Sniedovich	Decision-making under severe uncertainty: from worst-case analysis to robust optimisation	The University of Melbourne
Dr Belinda Spratt	Reducing post-surgery recovery occupancy under uncertainty	Queensland University of Technology
Dr Nadia Sukhorukova	Curve clustering using Chebyshev and Least Squares approximation	Swinburne University of Technology and Federation University Australia



“AMSI Optimise is a good opportunity to interact with a variety of researchers and professionals. The talks are varied in content, with different fields of optimisation represented, but also people from the industry.”

Julien Ugon
Deakin University

PARTICIPANT BREAKDOWN

UNIVERSITY/INSTITUTION	
APIC	1
Australian Bureau of Statistics	4
Australian National University	1
Bureau of Meterology	1
Deakin University	4
Defence Science and Technology Group	3
Department of Treasury & Finance	1
Federation University Australia	3
HEC Montréal (Canada)	1
Monash University	8
Murdoch University	2
Queensland University of Technology	1
RMIT University	5
Swinburne University of Technology	1
The University of Melbourne	25
The University of New South Wales	3
The University of Newcastle	6
The University of Queensland	1
The University of Sydney	1
University of Porto (Portugal)	1
University of South Australia	4
University of Southern Queensland	1
University of Technology Sydney	1
University of Washington (USA)	1
Western Sydney University	1

INDUSTRY	
Biarri	2
Country Fire Authority	2
CSIRO Data61	4
IBM Research	1
Lion Co	1
Melbourne Water Corporation	1
Opturion	1
Reserve Bank of Australia	1
The Simulation Group	1

GENDER		
Female	32	34%
Male	63	66%

ATSI		
Yes	0	0%
No	94	99%
Prefer not to disclose	1	1%

STATE/ TERRITORY		
ACT	5	6%
NSW	12	12%
QLD	3	3%
SA	5	6%
TAS	0	0%
VIC	64	67%
WA	3	3%
International	3	3%

PARTICIPANT TYPE		
Academic	31	33%
Agency	5	5%
Early-Career Researcher	6	6%
Honours	1	1%
Industry	8	9%
Masters	6	6%
PhD	35	37%
Research Institute	3	3%
Undergraduate	0	0%

RESIDENCY STATUS		
Australian Citizen	57	60%
Permanent Resident	12	13%
Student Visa	18	19%
Not an Australian Resident	5	5%
Prefer not to disclose	3	3%
Other	0	0%

95 attendees

“[Meeting] people from different backgrounds using optimisation for different applications increased my knowledge of the field and gave me many new ideas.”

Sofia Chaudry
Murdoch University

GRANTS

AMSI TRAVEL FUNDING

Travel funding to attend AMSI workshops, meetings and courses is available to students and early-career researchers of AMSI Member Institutions who cannot access other support.

In 2018, five PhD students and two early-career researchers from five AMSI Member Institutions were awarded AMSI travel funding:

- Mesias Alfeus
University of Technology Sydney
- Erika Belchamber
University of South Australia
- Philipp Braun
The University of Newcastle
- Minh Dao
The University of Newcastle
- Scott Lindstrom
The University of Newcastle
- Negar Vakilifard
Murdoch University
- Maziar Yazdani
The University of New South Wales



“Financial assistance from AMSI enabled me to participate in this event; I think that it is very important that we continue to keep these types of resources available to future students.”

Scott Lindstrom
The University of Newcastle

AMSI CHOOSEMATHS GRANTS

AMSI CHOOSEMATHS Grants are designed to provide full or partial support for Australian female mathematical sciences students and early-career researchers to participate in the AMSI Higher Education Flagship programs. The grants support women to build and extend their skills and professional networks by providing financial support to attend and/or assist with caring responsibilities. The Awards are funded by the BHP Billiton Foundation and are an initiative of the AMSI CHOOSEMATHS Project.



In 2018, one honours student, four PhD students and one early-career researcher from six AMSI Member institutions were awarded AMSI CHOOSEMATHS grants:

- Mahla Babagolzadeh
University of Southern Queensland
- Hoa Bui
Federation University
- Sofia Chaudry
Murdoch University
- Michelle Dunbar
University of Sydney
- Xuemei Lui
University of South Australia
- Saskia Van Ryt
University of Queensland



“I have received the CHOOSEMATHS grant a couple of times [to attend] different AMSI events. It helped me to decide to do a PhD degree in mathematics.”

Xuemei Liu
University of South Australia

PROGRAM EXTRAS

OPENING BUSINESS BREAKFAST

AMSI Optimise kicked off with the Opening Business Breakfast on Monday morning at University House. AMSI Optimise 2018 Event Director Dr Alysson Costa performed emcee duties with Professor Kate Smith-Miles (The University of Melbourne), Professor Peter Taylor (ACEMS) and Professor Geoff Prince (AMSI) each addressing the attendees before Joe Forbes, Biarri co-founder, delivered the opening address.



“I enjoyed the opportunity to network and strengthen my existing networks. It was a great event!”

Belinda Spratt
Queensland University of Technology

WOMEN IN OPTIMISATION PANEL

A panel made up of three generations of women in optimisation was held on the middle day of the conference. Chaired by Professor Kate Smith-Miles from The University of Melbourne, the panel consisted of Associate Professor Maria Antónia Carravilla (Universidade do Porto, Portugal), Associate Professor Marie-Ève Rancourt (HEC Montréal, Canada) and 88-year-old Alison Harcourt, co-author of the seminal 1960s optimisation paper “An Automatic Method of Solving Discrete Programming Problems”. This panel event and the pioneering maths work of Alison Harcourt received strong media attention. Alison went on to receive an honorary doctorate in science from The University of Melbourne and was awarded the 2019 Victorian Senior Australian of the Year.



POSTER SESSION

A poster session was held on Day 3 of the conference to give participants an opportunity to showcase their research to the audience and build their networks. Each presenter was given a few minutes to provide an overview of their poster to the audience followed by a Q&A session.

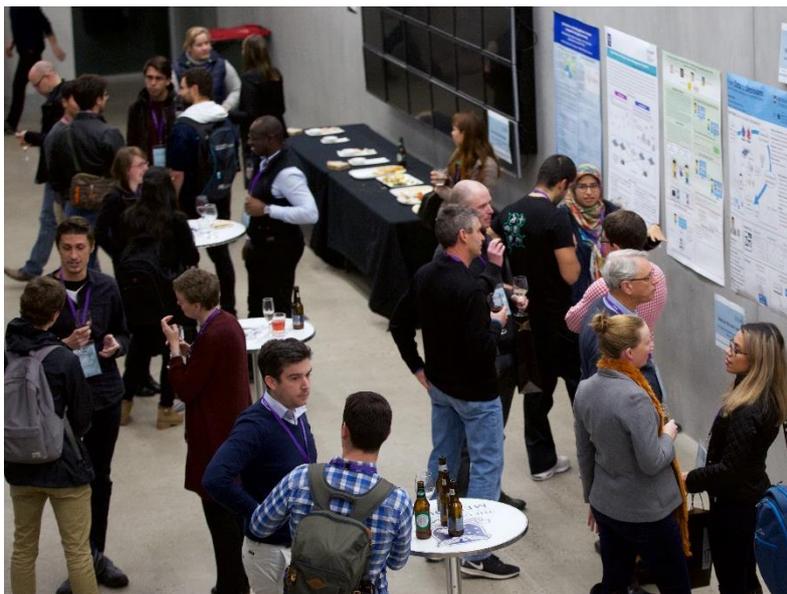
Nine abstracts were submitted for the poster competition from which attendees voted by an online poll to determine two Best Poster winners:

- **Dr Minh Dao**
Optimisation Design for Energy-Efficient Downlink Cloud Radio Access Networks
- **Cheng Cheng**
Optimisation of Disaster Waste Management Systems



NETWORKING DRINKS

To cap off the three-day conference, and as a welcome to the academic workshop part of the event, a networking session was held on Wednesday evening.



As I am very early in my career, the event was a great way for me to network and be introduced to the optimisation community, and to get an idea of what is currently being done.

Saskia Van Ryt
University of Queensland

FEEDBACK

50%

Fifty per cent of attendees at AMSI Optimise 2018 completed the online survey to provide their feedback and comments on the event.

8.6

The respondents' average rating of their overall experience at the event was 8.6 out of 10, where 1 is poor and 10 is excellent.

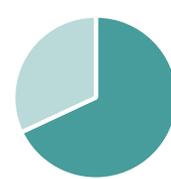
AMSI OPTIMISE WAS OF A HIGH STANDARD

Strongly Agree	60%
Agree	34%
Neutral	6%
Disagree	0%
Strongly Disagree	0%



AMSI OPTIMISE WAS WELL ORGANISED

Strongly Agree	68%
Agree	32%
Neutral	0%
Disagree	0%
Strongly Disagree	0%



THE PRESENTATIONS WERE PROFESSIONAL AND ENGAGING

Strongly Agree	51%
Agree	45%
Neutral	4%
Disagree	0%
Strongly Disagree	0%



I FOUND THE SOCIAL EVENTS A GOOD OPPORTUNITY TO NETWORK

Strongly Agree	43%
Agree	49%
Neutral/didn't attend	6%
Disagree	0%
Strongly Disagree	2%



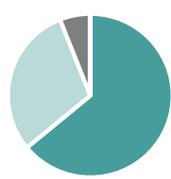
THE CONTENT PRESENTED WAS RELEVANT TO MY STUDY/PROFESSION

Strongly Agree	45%
Agree	47%
Neutral	6%
Disagree	0%
Strongly Disagree	2%



I WOULD RECOMMEND AMSI OPTIMISE TO OTHERS

Strongly Agree	64%
Agree	30%
Neutral	6%
Disagree	0%
Strongly Disagree	0%



"[AMSI Optimise] covered a wide variety of topics within optimisation; as a student I feel I learnt a lot about my field."

Nicolau Andres Thio
The University of Melbourne

EARLY-CAREER RESEARCHER PROFILE



Maximising Opportunities for Women at AMSI Optimise

Sofia Chaudry
Murdoch University

As a chemical engineer working in process modelling and optimisation, Murdoch University's Sofia Chaudry knows the importance of getting the best results with the greatest efficiency.

Like the organisations that benefit from her research, Sofia's CHOOSEMATHS Grant meant she could make the most of AMSI Optimise 2018. "I have

a young family. I would not have been able to attend the full event (conference and workshop) without [this] grant," she explains.

For Sofia, who uses techniques such as superstructure optimisation to help process engineers design the most suitable industry process to meet their organisation's objective within process limits, AMSI Optimise was a chance to see industry impacts up close.

"This event was great in showing industry's work in optimisation. A joint event including industry and academia is a great idea to strengthen research-industry collaboration," she enthuses.

Sofia believes networking opportunities and exposure to industry needs are a big challenge for women. As the first recipient to receive family assistance through the Choose Maths grant, she was able to fully engage with everything Optimise has to offer while knowing her family was nearby.

"Choose Maths is a wonderful opportunity for women in mathematics. Participating in events such as AMSI Optimise is essential to enhance their mathematical skills and share their research," she says.

At AMSI Optimise, Sofia was able to engage with a broad range of people and applications of optimisation. "I was drawn to the event's focus on industry need and the chance to engage with people from different backgrounds using optimisation for different applications."

Inspired by her experience, she is now looking forward to exploring new avenues and opportunities within her research. "AMSI Optimise enhanced my knowledge of optimisation and its use across various industrial applications and gave me new research ideas," she says.

EARLY-CAREER RESEARCHER PROFILE



AMSI Optimise: A Happy, Dynamical Accident

Scott Lindstrom The University of Newcastle

University of Newcastle PhD and AMSI Optimise 2018 attendee Scott Lindstrom fittingly describes his mathematical journey as a ‘long, hopping sequence of happy, dynamical accidents’.

This seems a fitting analogy for a researcher fascinated by dynamical systems that arise from “hopping” methods for solving optimisation problems. Asked to explain his work, Lindstrom uses the example of a grasshopper only able to see one plate at a time while trying to find the point on the table where two plates overlap.

“A natural strategy is to hop first to the closest point in the first plate, and then from there to the nearest point of the second plate. This sequence of hops forms what mathematicians call a dynamical system,” he explains. Such dynamical systems (swap plates for restrictions on the solution) are used to solve a wide range of optimisation problems.

Keen to explore these applications, he was drawn to AMSI Optimise: the Australian Mathematical Sciences Institute’s (AMSI) newest flagship training event. Despite a student income, he was able to attend thanks to an AMSI Travel Grant. “Financial assistance from AMSI enabled me to participate in this event. I think it is very important we continue to keep these types of resources available to future students,” he says.

Events such as AMSI Optimise offer students rare access to industry, established researchers and importantly field leaders. “I found it very helpful to meet with my collaborators from around Australia and to ask some of my pressing questions to Terry Rockafellar, a leading expert in my field,” he says.

With the aim of strengthening ties between academia and industry, the event gives attendees a glimpse of how the pieces of the optimisation puzzle fit together. These linkages open exciting opportunities for new investigation and collaboration.

“AMSI Optimise brings together a diverse collection of students and [field] experts. I appreciate the opportunity to meet and collaborate with researchers in my own area, and also look for connections to other research areas,” says Lindstrom.

While yet to work with industry, Lindstrom hasn’t rule out anything for when he returns from a postgraduate position with Hong Kong Polytechnic University. “I feel greatly blessed to be part of the Australian optimisation community. In the future, I see myself returning to Australia and giving back, in a continuing academic capacity.”

MEDIA RELEASE

Three Generations but STEM Gender Equity Still a Work in Progress

Melbourne, Victoria

Monday 18 June 2018

Spanning three generations, a panel of female optimisation experts will tackle gender equity at this week's Australian Mathematical Sciences Institute (AMSI) Optimise 2018 conference on Decision Making Under Uncertainty and Humanitarian Applications.

Despite slow progress, women still account for only 16 per cent of Australia's Science, Technology, Engineering and Mathematics (STEM) workforce and 9 per cent of mathematics professors, with some barriers the same as in the 1960s.

Chaired by University of Melbourne's Professor Kate Smith-Miles, panel members speaking at today's session include Assistant Professor Marie-Ève Rancourt (HEC Montréal), Associate Professor Maria Antónia Carravilla (Universidade do Porto) and Optimisation and statistics pioneer Alison Harcourt.

Still working at the University of Melbourne at 88 years old, Harcourt says while she has seen some positive changes over her six decades in academia, there is still a long way to go.

"While comparatively better than it once was, maths is still very male-dominated, particularly through the top levels," she says.

Harcourt, co-author of landmark 1960s optimisation paper "An Automatic Method of Solving Discrete Programming Problems", says isolation and time out for family had lasting impacts on her career.

"With no master's supervisor I did it all myself and as a result decided not to do a PhD. Time out for family made it difficult to find my way back into the field, so I moved towards statistics," she said.

Harcourt was also part of the team behind the Henderson Poverty Line and played a key role in the amendment of the Commonwealth Electoral Act to introduce the 'Double Randomisation' method still used today.

Having seen industry reluctance to embrace research, she applauds programs such as AMSI's APR.Intern, which is expanding opportunities for women and academic engagement with industry.

"This creates great opportunities for women and engagement with industry. Despite its applications, when I was working in optimisation the research was viewed as a threat rather than an opportunity for input and collaboration," she said.

Comprising a three-day industry facing conference and two-day workshop, AMSI Optimise aims to foster critical industry-research collaboration to drive innovation.

As well as providing an important platform to accelerate optimisation research and its industry applications, AMSI Director Professor Geoff Prince says the event is a game changer in opening avenues to expose PhDs to commercial innovation environments.

“AMSI Optimise not only offers a unique space for researchers and industry to explore opportunities to drive cutting-edge collaborations, but nurtures pathways to place some of brightest STEM PhDs at the industry frontline through APR.Intern,” he says.

Hosted by the University of Melbourne, AMSI Optimise will run in Melbourne from 18 – 22 June.

Jointly sponsored by AMSI, APR.Intern, the Department of Education and Training, the University of Melbourne, ACEMS and Biarri, AMSI Optimise is part of the Institute’s Securing Australia’s Mathematical Workforce project.

MEDIA COVERAGE

- 18 June 2018 – *Gizmodo*
88-Year-Old Statistics Pioneer Says Some Barriers For Women In STEM ‘Haven’t Changed Since The 60s’
<https://optimise.amsi.org.au/88-year-old-statistics-pioneer-says-some-barriers-for-women-in-stem-havent-changed-since-the-60s/>
National Reach: 1 093 014
- 27 June 2018 – *The Australian*
Maths pioneer Alison Harcourt sees progress for women
<https://optimise.amsi.org.au/maths-pioneer-alison-harcourt-sees-progress-for-women/>
National Reach: 1 324 814

COMMITTEES

AMSI wishes to acknowledge the generous donation of time and scientific advice of the following committees—without their contribution this event would not be a success:

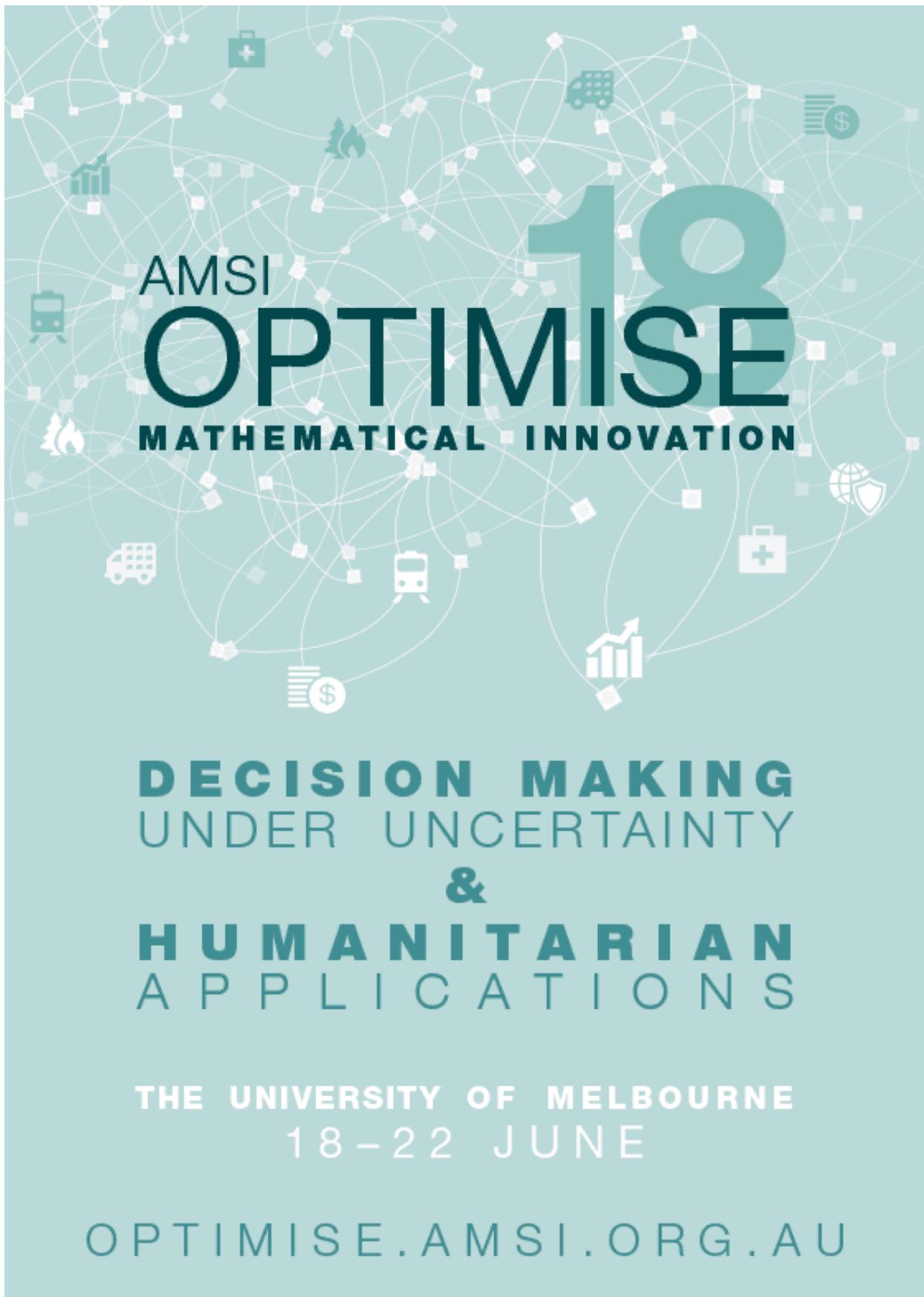
STANDING COMMITTEE

- Ruel Abello
Australian Bureau of Statistics
- Regina Burachik
University of South Australia
- Alysson Costa
**The University of Melbourne
Committee Chair**
- Angela Coughlin
**Australian Mathematical Sciences
Institute
Committee Secretary**
- Simon Dunstall
Data61 CSIRO & ASOR
- Andrew Eberhard
RMIT University
- Andreas Ernst
MAXIMA, Monash University
- Chris Fricke
The Simulation Group
- Gary Froyland
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- Chloe Pearse
**Australian Mathematical
Sciences Institute**
- Geoff Prince
**Australian Mathematical
Sciences Institute**
- Glen Sheldon
**Australian Mathematical
Sciences Institute**

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**The University of Melbourne
AMSI Optimise 2018 Event Director**
- Angela Coughlin
**Australian Mathematical Sciences
Institute**
- Chloe Pearse
**Australian Mathematical Sciences
Institute**





AMSI

18 OPTIMISE

MATHEMATICAL INNOVATION

DECISION MAKING
UNDER UNCERTAINTY
&
HUMANITARIAN
APPLICATIONS

THE UNIVERSITY OF MELBOURNE
18-22 JUNE

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