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Final Report

Science Connections Programme

Funding Agreement

Australian Institute of Physics

Outreach Program

2005

This is the final report in accordance with the Science Connections Programme - Funding Agreement for the Australian Institute of Physics Outreach Program, 2005.

The final report uses the topics specifically listed in Schedule 1, Clause I, Section I.3.

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2 Overview: Einstein Year puts physics on the map

The Australian Institute of Physics marked the Einstein International Year of Physics (Einstein Year for short) with a national program that:

- involved tens of thousands of people in physics activities;
- brought physics and physicists to the attention of millions of people through the media;
- gave an tremendous boost to physicists' pride in their discipline and vocation;
- demonstrated that physics touches every person's life- every day and every moment;
- engaged a diverse range of organisations in talking about physics – from Writers' Festivals to the ABC, to teachers, even agricultural shows; and,
- created a platform for the future promotion of physics in Australia.

Einstein Year was made possible in Australia by a generous grant of \$80,000 from the Commonwealth Department of Education, Science and Training, Australian Institute of Physics funds of \$50,500 and additional in-kind support of at least \$200,000 in labour and materials from AIP members for the 160 events staged under the Einstein Year banner. Further support for running Einstein Year activities was provided by external individuals and other organisations.

The Year started at the 16th Biennial Physics Congress in Canberra in January. Public forums included an industry forum, a school outreach program, Humboldt Workshop, National Press Club Lunch, Sutherland lecture, the Time Warp Competition and a Young Physicist forum.

Stanford's Australian-born Helen Quinn, one of our international laureate speakers, delivered lectures across the across Australia and captivated the media and the public with her descriptions of the challenges facing physics today. She told us, "Stars, planets, galaxies and all that we can see make up just four per cent of the universe. About 23 per cent is dark matter which we are starting to understand. The balance of 70 per cent is dark energy which we know next to nothing about."

Later in the year South Africa's Templeton prize winner George Ellis challenged the notion that the powers of science are limitless. He noted the inability of even the most advanced physics to fully explain factors that shape the physical world.

In Science Week, Harvard's Lisa Randall, the world's most highly cited physicist, explained how string theory and 'branes' "can offer an explanation for what we see in our four dimensional universe." New Scientist's physics editor, Valerie Jamieson discussed "100 things to do before you die and a few to do after." Stephen Squyres from Cornell University gave a moving account of the progress of his 'babies' on Mars – the two rovers that are transforming our understanding of the Red Planet.

Our international speakers were complemented by a national tour of Australia physicists explaining Einstein's big ideas.

One of the Institute's experiments for Einstein Year was a seed grant program. Across Australia \$37,115 was used to fund sixteen original initiatives.

Some recipients were individuals like ANU PhD student Melanie O'Byrne – her flowvis exhibition toured nationally and was seen by over 100,000 people. Some grants helped our major research organisations reach new audiences – CSIRO ran a physics short film competition that was screened in 70 venues and reached 10,000 people.

Through the seed grant scheme, thousands of Australians were exposed to a world so often sealed behind laboratory doors. And many project managers have expressed interest in continuing their initiatives into 2006.

In all, over 160 events reached thousands of people over the year while media coverage of physics reached millions more.

Importantly, the Year has helped transform the public outreach programs of the AIP and has laid the foundations for a more active promotion of physics in the years ahead.

3 Report on the status of each project

This section reports on the status of each project listed in Clause C2 of the Contract between DEST and AIP. This section states:

C.2 The Project comprises a set of activities designated by the AIP that are designed to promote the Einstein International Year of Physics 2005 (Einstein Year) in Australia and to enable community participation in celebrating Einstein Year:

- Einstein Year general publicity: Funding toward a resource pack made up of posters, postcards and general information sheets to be mailed out and made available on the website for download;
- Einstein Year First Round Project proposals: Funding of up to \$3,000 each for five projects, selected on merit through a competitive grants round;
- Eratosthenes Project: Schools along lines of longitude through Australia, Papua New Guinea and East Timor will cooperate to measure the circumference of the Earth;
- National Lecture Tour: Funds will assist costs of venue hire and travel for distinguished visitors to give talks and media appearances in state and regional centres;
- Media liaison to promote the International Year of Physics;
- Promotion of the Australian Government's Malcolm McIntosh Prize for Physical Scientist of the Year: encouraging AIP members to make nominations for this Prize in 2005, and utilising the services of recipients of this Prize in 2004 and 2005 in the AIP's celebration of the International Year of Physics;
- Einstein Year Second Round of Project proposals: Funding of approximately \$3,000 each for five to six projects, selected on merit through a competitive grants round; and
- Einstein Year Project coordination and publicity.

Key deliverables and outcomes

The project met and in many cases substantially exceeded the agreed deliverables.

This was in part because the AIP was able to leverage the DEST investment in Einstein Year with a further \$50,500 of AIP funds and an estimated \$200,000 of in-kind support from members.

Agreed deliverables	Actual outcomes
Stakeholders identified and briefed via monthly bulletin	651 stakeholders were identified and 13 bulletins were issued
Approximately ten grants awarded to groups around the country for small community events	16 grants were issued – using grant funds and additional AIP funds
Establishment and maintenance of a website for the Einstein Year	An effective site was established and can be viewed at www.einstein2005.org.au
A comprehensive communication and marketing plan	A comprehensive plan was developed and implemented – details are contained in this report.
An effective and high profile launch at the Physics Congress	A high profile launch was held with the assistance of Questacon. This, and other media stories contributed to a strong launch of Einstein Year.
Wide public distribution of posters and postcards	Two posters were produced. 10,000 copies were distributed widely to schools, AIP members and event managers. A postcard was produced and 40,000 distributed via Avant Card to educational outlets, restaurants, cinemas, bookshops and cafes
Media coverage of physics and physics related issues – at least 200 media articles attributable to the Einstein Year.	9 national media releases were issued, at least 10 other stories were distributed in bulletins 5 Science Week media releases (not issued by the AIP) also

	had strong Einstein Year themes. Formal media monitoring was not included in the project. However over 52 stories were reported in Science Week alone. We are confident that the overall coverage exceeded 200 articles.
At least 50 meetings/events/activities around the country	160 activities were registered on the Einstein Year website. There were many additional events that were not registered. 29 national lectures were held, along with at least 11 eminent visitor lectures
Extensive schools participation in the Eratosthenes project	102 schools participated spanning across all states including Christmas Island. Minister Nelson launched the project on Channel Seven. The project attracted substantial media coverage.
A comprehensive final report to DEST.	This document serves as a comprehensive report on the project.

3.1 Einstein Year general publicity

3.1.1 Stakeholders

A stakeholders list was developed by compiling the contact details of as many physicist researchers across Australia, science teachers associations and other organisations whose work is based on physics or had some interest in physics. A notice was also placed on the front page of the Einstein Year website inviting visitors to sign up to receive regular news bulletins.

Each month a news bulletin was emailed to this stakeholders list which grew over the year to finish with 651 people. The bulletins contained a selection of events for the upcoming month, a snapshot of the previous month's activities and other news.

Over the month of August there were a number of events planned with a physics flavour. An additional bulletin was issued specifically to highlight those physics events held in Science Week. The August bulletin is attached in Appendix 1.

3.1.2 Website

A website was created for the Einstein International Year of Physics – www.einstein2005.org.au. The URL www.einstein.org.au was also purchased and redirected to the Einstein Year website. The website went live in April 2004 and acted as a contact point for members of the community, students, teachers and event managers. Enquiries were received from both the community and media via the website.

The website listed news items on the front page with buttons pointing through to an events page where readers could search for events in their state, a resources page with information sheets, logos and posters and a contacts page with contact details for the Australian Institute of Physics.

An invitation was extended to all stakeholders and visitors to the website to register their physics events as being part of the celebration for the International Year of Physics. The first event was registered in April 2004 and by the end of the year, 160 events had been registered. For each state:

- National - 12 listed events
- ACT - 13 listed events
- NSW - 30 listed events
- NT - 1 listed event
- QLD - 16 listed events
- SA - 21 listed events

- TAS - 21 listed events
- VIC - 28 listed events
- WA - 18 listed events

Resources were offered on the website such as:

- information sheets on 'what is the Einstein Year' and 'Einstein's Big Ideas'.
- logos which could be used to brand events as being part of the Einstein International Year of Physics,
- banners which could be borrowed for events
- posters which could be downloaded or posted out
- advice and suggestions on running an event.

The website was maintained and updated regularly. In the second half of the year the front page was modified to profile events with an image and headline.

The Einstein Year website will remain as a record of the International Year of Physics in Australia.

Screenshot of the Einstein Year homepage:

**Einstein International Year of Physics 2005
IN AUSTRALIA**

2005 has been declared the International Year of Physics. One hundred years ago, a 26-year old Albert Einstein presented four revolutionary ideas which changed the way we view our world.

There are a host of events, activities and celebrations happening around the globe.

In Australia, we have a national lecture tour explaining Einstein's ideas, a national experiment to measure the circumference of the globe, hands-on workshops, laser shows, didjendu physics, physics films, festivals, exhibitions and more...

Check out the events in your state, sign up to receive our regular bulletin about what's happening, contact your local branch of the AIP and get involved.

We've got posters and stickers we can send out for your event, as well as a list of speakers you could invite along. You can also download the poster from the site, including one that has space for you to write details about your Einstein Year event.

It's proving to be a memorable year and I welcome your comments and suggestions.

Year of Physics News

A final salute to the Einstein Year
And so we reach the end of a memorable year. In December there is a lecture and teacher session in Tasmania, a physics arts exhibition at Macquarie University and physics at Luna Park.


The physics behind today's hot issues
One hundred years after Einstein's year of discovery what does physics hold for the 21st century? Speakers notes for the Physics Breakfast, Wednesday 5 October.

Physics in Action

- Einstein Returns
- Taking Science to Island School
- Substance - a triumph of mind over matter
- Einstein's Administrative Legacy
- How's the art of fluid dynamics
- at records

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3.1.3 Promotion

3.1.3.1 Posters

Two posters were designed and printed during the Einstein Year. The first poster was a striking image of pink paint splashing onto a purple surface showing the movement of fluids – an area of study in physics. Along the top of the poster was a series of images showing physics in the world around us.

This poster can be seen in Appendix 2.

The first poster was distributed as follows:

- all secondary schools in Victoria (courtesy of Melbourne University),
- included in every copy of *Australian Physics*, the AIP's bimonthly magazine,
- each state branch of the AIP for their events and
- event managers including those funded through the seed grant scheme.

Due to the high demand and interest in the first poster, a second Einstein Year poster was designed and printed.

The second poster showed an inky black sky with half of the earth at the bottom of the page. In the middle of the page was an astronaut floating high above the earth in the middle of the first untethered space walk. The wording on the poster was 'in search of explorers' with the idea that physics is an exploration of the world around us. The poster can be seen in Appendix 2.

Both A2 and A3 sizes were produced with the A2 posters going to major Science Centres across Australia and the A3 posters going into each of the journals for the various state Science Teacher Associations, the Science and Engineering Challenge events and to event managers.

The second poster was distribution as follows:

- Discovery Science & Tech Centre, Bendigo, Victoria (200)
- Scienceworks, Spotswood, Victoria (200)
- Qld Museum & Science Centre, South bank, Queensland (200)
- Investigator Science & Technology Centre, Regency Park, South Australia (200)
- Questacon, Kingston, Canberra (200)
- SciTech, West Perth, Western Australia (300)
- Science Teachers Association of Queensland (500)
- Science Teachers Association of Victoria (1,400)
- Science Teachers Association of New south Wales (800)
- Science Teachers Association of South Australia (680)
- Science Teachers Association of Tasmania (110)
- Science Teachers Association of Western Australia (750)
- Science Teachers Association of Northern Territory (50)
- Science Teachers Association of the ACT (80)

3.1.3.2 Postcards

A postcard was produced and distributed nationally through Avant Card to educational outlets, restaurants, cinemas, bookshops and cafes. They were distributed in July, one month before Science Week.

The postcard used one of the images from *flowvis*, an exhibition curated for the Einstein Year about the field of Fluid Dynamics. The image chosen was one that looks like an explosion with orange flames curling around and filling the entire front face of the postcard. The image is a snapshot of a shockwave moving at 15

times the speed of sound and was produced by Dr Ralph Sutherland from ANU. In the middle of the image were the words 'experience genius'.

The postcard can be seen in Appendix 3.

It took two to three weeks to distribute the 40,000 cards, including an additional 4,640 cards left over from the print run that Avant Card distributed free of charge. Avant Card rated the postcard as being highly successful and a "Fast Mover". Our contact officer at Avant Card received an enormous amount of positive feedback on the card and said it was used in business meetings as an example of what could be achieved with postcard promotions.

Some of the feedback from the distributors is included below and the full report on distribution in each state is included in Appendix 3.

NSW - AWESOME CARD!!!!!!!!!!!!!!!!!!!! 100% pick-up rate!!

VIC - Great looking image that worked well across the board in most venue types and in all suburbs. Very popular at the Scienceworks and Queen Victoria Markets.

QLD - The postcard image was well designed and very appealing. A fast mover.

SA - Very nice image here. Could be interpreted as a number of things. In fact some excellent comments received from 'fire' to 'wood' etc. Colour and design great. Text is very limited and fits in the middle well. The back has information about Einstein and the image on the front. Writing space is available. A Fast to Medium Mover best in Salisbury, Marion, Nowrood, CBD and Central Market - good in Unis, Cinemas and Cafes.

WA - Fast mover all venues.

ACT - Fantastic image, subtle text, good back lots of info, great card, fast mover all over especially universities.

TAS - It was not surprising to see this card move quickly. These type of cards are very popular. And I have seen many on the walls, and notice boards of not only the venues but other businesses.

3.1.3.3 Advertisements in Cosmos

Three advertisements were placed in *Cosmos* magazine. The first was offered free of charge by Cosmos magazine, as in-kind support toward the Einstein Year. Design costs were covered by the AIP.

The second advertisement was at half price and appeared on the back page of the September edition and again within the magazine in October. This edition went to every school in Australia, through the support of DEST.

The first advert incorporated the design from the postcard with the words 'light up the grey matter'. The second and third adverts incorporated the design of the second poster with text at the bottom of the page inviting readers to contact the AIP for resources on physics.

Copies of the advertisements are attached in Appendix 4.

3.2 Einstein Year first round project proposals

To broaden the reach of Einstein Year, two rounds of seed grants were offered for proposals up to \$3,000. DEST provided support of \$14,000 toward the first round and \$18,000 toward the second round.

The projects were selected for their reach, the ability to leverage the event in terms of media and the fact that some required funding immediately in order to promote and /or organise the event in question.

The first grants round in the Einstein Year attracted 27 proposals, of which five were granted using funds totalling \$13,900. These are listed below:

Round one projects were:

- 1) Through Einstein's Eyes - \$3,000 to Dr Craig Savage from ANU Physics Department for the production of an educational DVD based on viewing Saturn and its rings from near light speed. The Cassini mission to Saturn was of interest in 2005. The DVDs were distributed to all schools and have been made available as prizes at other events. The DVD has also been distributed in Canada through the Perimeter Institute and additional funding provided from Canada.
- 2) Physics demo troupe - \$3,000 to PhD students Joel Gilmore and Jenny Riesz toward the costs of staging physics shows and hands on workshops in Mt Isa and on the Torres Strait Islands.
- 3) Primary physics shows - \$2,500 to students Wade Shiell and Sean Manning for producing an interactive physics shows for primary students in Port Pirie, South Australia.
- 4) Physics in film - \$3,000 to Cris Kennedy towards the coordination and promotion of a physics student film category as part of Scinema, the national science film competition run by CSIRO and the National Museum. Scinema was promoted nationally and the films were made available for viewing at venues across Australia.
- 5) The art of fluid dynamics - \$2,400 to PhD student Melanie O'Byrne toward *flowvis*, a scientific art exhibition of fluid dynamics images. This was first exhibited in Canberra during the Physics Congress in February and travelled to a number of other states during the year. It was displayed at Science Week events, in school libraries and at a rural farm day.

All grant recipients were required to meet the following requirements:

- Acknowledge the Australian Institute of Physics where appropriate, for example, when organisers are thanked or in the footer of flyers.
- Incorporate the logo for the Einstein International Year into promotional material for the event.
- A representative from the organisation becomes a member of the AIP (Associate membership fees are \$80). This was to encourage the event managers to engage with the AIP and to provide a link to news, other events and contacts within the physics community.
- Provide an organisational contact and register the event on the Einstein Year website.
- Notify the state branch of the Institute of Physics about the event and where possible invite them to take part. This gave state branches the opportunity to build on and engage with planned events.
- Liaise with the Einstein Year Communication Team to identify media opportunities and maximise exposure for the event.
- Keep the Communication Team briefed on the progress of the event.
- Submit a short report including: short description, numbers attended, any media coverage, other follow ups and a summary of how the money was spent.

All reports from the grant recipients (both the first and second round) have been compiled and are included in Appendix 5.

3.3 Eratosthenes Project

RMIT University coordinated the Eratosthenes Project with Professor Peter Johnston and Alex Merchant as coordinators. This was a national experiment for secondary school students in Years 10, 11 and 12. Schools were invited to register and were then paired up with a school on the same longitude to measure the radius of the Earth.

A website was created where schools could register and obtain background information and teacher's notes. The website is www.rmit.edu.au/scienceweek

The project ran during National Science Week 2005 with 102 schools from across all states, including Christmas Island.

The Hon. Brendan Nelson launched Science Week at St Ives High School with students undertaking their Eratosthenes Project experiment using a flagpole donated to the school by Dr Nelson. The launch included television coverage on the Channel 7 *Sunrise* program.



Professor Peter Johnston spoke live to numerous ABC radio stations from Tamworth to Orange about the project. Following a press release issued during Science Week, a number of regional papers contacted the schools in their area and the project was written up in *The Age* and the *Herald Sun*.

These two news stories are attached in Appendix 6.

All other schools who submitted reports were posted a certificate of commendation. A prize of \$1000 was on offer to the best measurement including an analysis of uncertainties involved. The judging panel awarded a joint prize between two pairs of partner schools (four schools in total). Each winning school received a \$500 prize and were sent a certificate. The winning schools were:

- Year 11 San Sisto College, QLD
- Year 11 Ivanhoe Girls Grammar, VIC
- Year 10 Millicent High School, SA
- Year 11 St Josephs College Mildura, VIC

High commendations were given to Year 11 Boonah State High School (QLD), Year 11 Preston Girls Secondary College (VIC), Year 10/11 Nanango State High School (QLD) and Year 10 Lalor Secondary College (VIC).

3.4 National Lecture Tour

A National Lecture Tour with the theme “Einstein’s Ideas Explained” took expert physics speakers around the country to explain Einstein’s big ideas. Four lectures were created which explained each of Einstein’s big ideas presented in 1905 – the light quantum, $E=mc^2$, The Special Theory of Relativity and Brownian motion.

Additionally, a number of high profile laureate physicists visited Australia during the year. A public and media program was organised for each.

For both the national lecture tour and the Laureate tour, the staging and coordination was done on a volunteer basis by members of the AIP. This in-kind support by members of the AIP has been included in the estimated total of \$206,000 previously quoted.

3.4.1 AIP National Lecture Tour 2005 – Einstein’s Ideas Explained

A total of 29 public lectures were given by physicists in major centres around Australia. All lectures were well attended with some venues having to turn people away. The details of the national lecture tour are given below:

3.4.1.1 State	3.4.1.2 Date and Place	3.4.1.3 Topic	3.4.1.4 Speaker
ACT	Thursday 26 May 2005 - Canberra	$E=mc^2$: matter and energy entwined	Dr. Elisabetta Barberio
	Thursday 02 June 2005 - Canberra	The light quantum: from the humble photoelectric effect to the strange world of modern physics	Prof Raymond Volkas
	Thursday 16 June 2005 - Canberra	Einstein's theory of Special Relativity: light, time and space.	Prof David Jamieson
NSW	Friday 22 July 2005 - Sydney	The light quantum: from the humble photoelectric effect	Professor Raymond Volkas
	Friday 29 July 2005 - Sydney	How the mass movement of trillions of atoms changed the world	Professor Bruce McKellar
	Friday 05 August 2005 - Sydney	Einstein's theory of Special Relativity: light, time and space	Professor David Jamieson
	Friday 12 August 2005 - Sydney	$E = mc^2$: energy and matter entwined	Dr Elisabetta Barberio
	Monday 19 September 2005 - Wollongong	Einstein's theory of Special Relativity: light, time and space	Prof David Jamieson
	Friday 12 August 2005 - Armidale	$E = mc^2$: energy and matter entwined	Dr Elisabetta Barberio
NT	13/08/2005 - 19/08/2005 - Darwin and Alice Springs	Didjeridu - a triumph of mind over matter	Prof Lloyd Hollenberg
QLD	20 May 2005 – Brisbane	Einstein's theory of Special Relativity: light, time and space	Prof David Jamieson
	24 May 2005 - Brisbane	Tools of Science Lecture: Einstein and the Talkies	Prof Norman Heckenberg
	19 September 2005 – Brisbane	Einstein's Revolutionary Idea	Dr Andrew White
	20 September 2005 - Brisbane	Tools of Science Lecture: The Brownian Movement	Prof Norman Heckenberg
	23 September – Brisbane	Einstein and the Prehistory of Quantum Computing	Prof Howard Wiseman
SA	Wednesday 22 June 2005 - Adelaide	Einstein's Theory of Special Relativity: Light, Time and Space	Prof David Jamieson
	15 November 2005 – Adelaide	1905 Einstein's Miraculous Year	Prof Rod Crewther and Dr Sam Drake
TAS	Wednesday 13 July 2005 - Hobart	Einstein's theory of Special Relativity: light, time and space.	Prof David Jamieson
	Thursday 14 July 2005 - Launceston	Einstein's theory of Special Relativity: light, time and space	Professor David Jamieson
	Thursday 28 July 2005 - Hobart	How the mass movement of trillions of atoms changed the world.	Prof Bruce McKellar
	Thursday 04 August 2005 - Hobart	The light quantum: from the humble photoelectric effect to the strange world of modern physics	Professor Raymond Volkas
	Thursday 11 August 2005 - Hobart	$E=mc^2$: Energy and matter entwined	Dr Elisabetta Barberio
VIC	Friday 01 July 2005 -	The light quantum: from the humble	Prof Raymond Volkas

	Melbourne	photoelectric effect to the strange world of modern physics	
	Friday 08 July 2005 - Melbourne	Einstein's theory of Special Relativity: light, time and space	Prof David Jamieson
	Friday 15 July 2005 - Melbourne	How the mass movement of trillions of atoms changed the world	Prof Bruce McKellar
	Friday 29 July 2005 - Melbourne	$E=mc^2$: Energy and matter entwined	Dr. Elisabetta Barberio
	26 October – Melbourne	Einstein and the Prehistory of Quantum Computing	Prof Howard Wiseman
WA	6 May - Perth	Celebrating Einstein's 1905 Discoveries	Prof Igor Bray
	5 April – Perth	Einstein Returns	Prof David Blair

3.4.2 Laureate Lecturer Tour

A number of prominent physicists visited Australia during 2005. The AIP encouraged each of them to extend their trips in order to visit other states and present public lectures. A total of 11 public lectures were given and are listed below with full or partial support provided.

State	Date and Place	Topic	Speaker
ACT	15 July 2005 - Canberra	Cosmology - Universal Questions	Professor George Ellis
NSW	6 February 2005 – Sydney	The Mystery of the Missing anti-matter	Prof Helen Quinn
	15 August 2005 – Sydney	Warped Passages: Unravelling the Mysteries of the Universe's Hidden Dimensions	Prof Lisa Randall
	26 September 2005 – Sydney	Einstein from 1905 - 2005: Theory and Experiment	Prof Malcolm Longair
	27 September 2005 – Newcastle	Einstein from 1905 - 2005: Theory and Experiment	Prof Malcolm Longair
TAS	14 February 2005 – Hobart	The Mystery of the Missing anti-matter	Prof Helen Quinn
QLD	9 February 2005 – Brisbane	The Mystery of the Missing anti-matter	Prof Helen Quinn
	6 April 2005 – Brisbane	Paul Davies talks Einstein	Prof Paul Davies
	17 February 2005 – Adelaide	The Mystery of the Missing anti-matter	Prof Helen Quinn
VIC	Friday 22 July 2005 - Melbourne	Curved Space and Compassion: Is there a link between Einstein's General Theory of relativity and our Humanity?	Prof George Ellis
WA	16 February 2005 – Adelaide	The Mystery of the Missing anti-matter	Prof Helen Quinn

3.5 Media liaison to promote the Einstein International Year of Physics

The AIP recruited Niall Byrne and his team of science communicators from *Science in Public* to assist with the communication and media plan for the year. The AIP has retained their services for general communication and media. This strategy of appointing professional science communicators has greatly extended the impact of the Einstein Year on the Australian Public compared to what would have been possible with normal AIP resources.

3.5.1 Media releases

Science in the Public identified media opportunities and provided media advice to event managers when requested.

A number of media releases were issued including:

Einstein changed the 20th Century. What will physics do to the 21st Century?

Einstein Year launch, 25 January 2005, Questacon, Canberra

In 1905 Einstein published a series of papers that changed history. At the age of 26, he introduced the idea of light as both particle and wave, and published his special theory of relativity that led to $E=mc^2$ and all that followed.

flowvis: the 'Art' of Fluid Dynamics

31 January - 4 February 2005

ANU School of Art - Foyer Gallery

Physics and art collide in a special exhibition at the ANU School of Art this week. flowvis is a free exhibition of 30 stunning images showcasing the breadth and beauty found in the field of 'Fluid Dynamics' - the study of fluid motion behaviour of fluids, whether that fluid is a liquid, gas or plasma.

What's the Universe made of? We don't know.

Four per cent of the universe is stars, planets – the stuff we can see. But what's the rest ?

"About 70 per cent of the universe is mysterious dark energy," says Australian –born Helen Quinn, President of the American Physical Society and visiting Melbourne this week for Einstein Year. Helen Quinn's tour

Is Einstein over-rated?

Brisbane debates – Einstein defends himself at the pub

Was Einstein the person of the 20th Century as Time Magazine claims? Brisbane researcher Damian Pope isn't convinced. So he and his colleagues have organised a public debate to get to the heart of the matter.

"It's Einstein Year. To many, Einstein is a great hero," says Damian. "Indeed, a few years ago, Time named him as their person of the 20th century."

Einstein in Adelaide

Celebrating the past, present and future of physics:

SA Museum, 6 pm Friday 8 April 2005

South Australian physicists have united to celebrate Einstein Year, and to consider the future of physics in society – with an art exhibition and a teacher award.

"Our celebrations start this Friday with the opening of flowvis – a free public exhibition of stunning images from the world of fluid dynamics," says Dr Olivia Samardzic, Chair of the SA branch of the Australian Institute of Physics.

$E = mc^2$ the equation that changed the world...

Einstein books out Brisbane – Wednesday 6 April 2005

" $E=mc^2$ is the only equation we've all heard of," says Paul Davies. "It tells us that mass is a form of energy. It tells us what makes the sun shine, and allows us to create matter."

Davies is one of Australia's leading physicists and cosmologists. He is speaking in Brisbane on Wednesday night to celebrate Einstein Year. Adelaide Einstein Year launch and flowvis combined

"Fat Man" and the nature of the universe

19 July 2005

As we mark the 60th anniversary of "Fat Man," – the first atomic bomb – physicists around the country are keen to talk about the implications of Einstein's magic year of discovery – 100 years on.

Highlights this month include: Australia's forgotten Einstein, Was there ever a start to the Universe? Can physics explain humanity?

Tassie teacher takes action on science literacy

Energy Fair gets secondary students to inspire primary students

Monday 29 August 2005

Throughout Australia's National Science Week, eminent scientists called for urgent action to get more young

people interested in science and engineering.

“...not enough kids want to go into science and engineering to solve them,” said Kroto.

“We need to enthuse the next generation of scientists and engineers.”

Enter Exeter High School science teacher Jane Dadson. She has hit on a unique way to boost science in schools.

Time to get serious about $E=mc^2$ – the leading light of equations

David Jamieson, President, Australian Institute of Physics

One hundred years ago today [Tuesday, 27 September] Einstein’s publishers received a manuscript from the young Albert Einstein containing what we now recognise as the most famous equation of all time. $E=mc^2$.

It powers the sun, and therefore life on Earth. It’s become an icon of its time – recognised by most of us. But are we wasting the opportunity to use its awesome power to create a more sustainable future?

Copies of the media releases are given in Appendix 7.

These media releases were in addition to releases by individual event organisers.

As well as media releases, a number of physics stories were promoted in media bulletins issued regularly by Science in Public to journalists. Some of the stories included were:

- Keeping light behind bars
- And daily releases mentioning physics stories
- Einstein’s biggest mistake?
- No labs, just blackboards – science the way Einstein did it
- Einstein and the black hole at the heart of our galaxy
- The future of physics – free media breakfast forum
- \$15,000 Einstein Year arts prize open for entries
- Einstein does Koondrook Barham Show
- Einstein was a refugee and
- The Keeper of Einstein’s Legacy

The stories were picked up nationally on television, radio and print.

A full page article on ‘Australia’s Einstein’: William Sutherland and other Einstein Year items appeared in the Age newspaper on July 31. The AIP contributed material to this article.

3.5.2 Media mentions of physics during National Science Week

Science Week had a particular physics flavour in 2005. The Science Week media team issued a number of media releases with a physics theme including:

- Noel Sharkey and robots
- Kroto and science education
- Eratosthenes national
- Eratosthenes local and
- Daily releases mentioning physics stories.

The table below is a summary of physics media mentions during Science Week and immediately afterwards. Radio hits do not count syndications separately – several radio interviews listed here were syndicated to multiple stations increasing the number of listeners per hit.

Event/speaker	Newspaper hits	Radio hits	Total hits
Eratosthenes	2	3	5
Lisa Randall	0	5	5
Valerie Jamieson	3	2	5
David Jamieson	1	0	1
Lloyd Hollenberg	1	2	3
Fred Watson	0	7	7
Noel Sharkey	2	3	5
Ken Skeldon	3	4	7
Steve Squyres	6	8	14
Total	18	34	52

See below for more details of Prof Hollenberg's national lecture tour (with demonstrations) on "The physics of the didgeridu".

Highlights of the media hits include:

- Noel Sharkey on Margaret Throsby's show and in MX
- Fred Watson receiving comprehensive coverage in Queensland (where his talks were)
- Valerie Jamieson and Lisa Randall each on Conversation Hour
- Eratosthenes Project – local schools appearing in local media
- Lisa Randall on Radio National PM

Steve Squyres, Chief Scientist for the Mars Rover Mission, received 14 media mentions up till the 24th of August which was the date when the Mars explorer Spirit reached its goal. As he was still touring in Australia he received additional media attention related to the Mars mission.

The details of these media interviews are given in Appendix 8.

3.6 Einstein Year second round of project proposals

The second grants round in the Einstein Year attracted 45 proposals, of which eleven were granted to a total of \$23,115. These are listed below and the grant recipients' full reports are included in Appendix 5.

Round two projects were:

- 1) Physics all around - touring heritage sites around Brisbane highlighting physics in the world around us – \$1,000 to Kerri Laidlaw from Brisbane's Living Heritage Network, Qld.
- 2) The physics of the didgeridu by particle physicist Lloyd Hollenberg, touring Victoria and the Northern Territory - \$3,000 to Helen Gardiner who coordinated the tour.
- 3) A physics tent and theme at the Koondrook-Barham Show in regional NSW - \$1,000 to Simone Boyd from the show committee.
- 4) Moonlight and the Movies @ The Strand in Townsville, North Qld. An astronomy viewing of the moon and other celestial objects using telescopes set up on the strand and combining it with physics-based movies screened at the Lifesaving club - \$3,000 to Damian Harris from CSIRO Science Education & Graeme White from James Cook University.
- 5) A ride for your mind: adding a physics show and platform display to the annual QUT Smart Train that travels throughout Queensland for five weeks - \$3,000 to Melissa Falla from Queensland University of Technology.
- 6) Playground physics: a series of activities and worksheets that teachers can use to find physics in local playgrounds - \$3,000 to Dan O'Keefe (VIC).
- 7) An Extraordinary Energy Exploration bringing together secondary and primary schools in the West Tamar District of Tasmania - \$1,500 to Jane Dadson, Science Coordinator at Exeter High School.

- 8) A series of short physics stories prepared for radio and distributed to radio stations across Australia – \$3,000 to David Ellyard (NSW).
- 9) Talking stars, astronomy and the square kilometre array with Fred Watson from the Anglo-Australian Observatory – \$2,115 to Kelly Kranz Little from the Office of Science and Innovation (WA).
- 10) A lecture and live remote observations using the Mt Kent Observatory with Fred Watson – \$500 to Brad Carter from University of Southern Queensland (regional QLD).
- 11) A resource kit and worksheets for teachers on fuel cells, based on the Ecobus in WA – \$2,000 to Dianne Tompkins, Real World Science Coordinator, and
- 12) An Einstein Extravaganza weekend at the Sydney Observatory. And linking into the 150th anniversary of railways in NSW, an Einstein on Rail trip covering transport and physics whilst on-board – \$3,000 to Toner Stevenson from the Sydney Observatory.

The January edition of *Australian Physics*, the AIP's bimonthly journal, includes a feature article on the grants program. This is attached in Appendix 9.

3.7 Einstein Year project coordination and publicity

The AIP recruited Niall Byrne and his team of science communicators from *Science in Public* to assist with the communication and media plan for the year; and have retained their services with general communication and media.

They developed a communication plan with the following aims

- To enhance the public perception of physics as a vital part of human science and culture
- To create a more vibrant and collaborative physics community in Australia
- To highlight the rational view of the world.

Their action plan in brief was:

Prior to 2005:

- Engender a sense of excitement within the physics community
- Encourage everyone with an interest in physics to contribute their ideas
- Consolidate their ideas into a working communication and marketing plan

In 2005: Deliver the plan

The components included

1. Build a stakeholder list of:
 - People in the physics community who should be involved
 - People and organisations outside the physics community whom we would like to have involved.

The aim of the list was to engage and enthuse both the physics community and the wider community about the International Year of Physics and to inform them of opportunities, events and activities. It would also engender a sense of activity on a national scale.

2. Send monthly bulletins.
3. Liaise with specific groups with resources we can tap into. This involved preparing material /ideas beforehand, initial contact, report back to AIP and initial follow through. Groups that got involved included:
 - Various elements of the ABC

- Melbourne City Council
 - Scinema – potential to include physics-based films or a physics theme
 - Melbourne Writers Festival
 - National Science Week Committee
 - Rio Tinto Science Olympiads
 - Schools through the State Departments of Education
 - Scienceworks – teacher professional development for relativity in the curriculum (Follow up on AIP's contact)
 - Science Teacher Associations through their conferences and newsletters.
4. Maintain web site with activities and contact details for each state.
 5. Create all encompassing communication, media and marketing plan to follow through with management of the IYP in 2005.

The results of this strategy are illustrated throughout this report including:

- The interest generated by the grants program
- The extensive media coverage of Einstein Year activities
- The many and varied events held under the auspices of Einstein Year.

The most obvious example is Science Week in which many organisations evoked strong Einstein Year themes throughout the Week. This is outlined below.

3.7.1 Science Week

One of our objectives for promoting the Einstein Year was to encourage other organisations and events to pick up Einstein and physics themes. We liaised with the groups involved with National Science Week: DEST, the ABC and ASF regarding the inclusion of physics into the Week.

National Science Week 2005 overflowed with physics, from film festivals to Einstein with a dash of Lab-coat pride in Sydney.

Due to the number of physics events in August, a special edition 'Science Week Einstein Year' bulletin was sent out highlighting some of the special events. They included:

- International speakers Ken Sheldon and Noel Sharkey toured nationally as guests of the Australian Science Festival. Ken Skeldon from Harvard performed his Arcs and Sparks show and rebutted moon sceptics, and Noel Sharkey, the inspiration for Robot Wars, spoke on artificial intelligence. Both gave a number of media interviews,
- Einstein Rally in Sydney at The Domain. The launch of Science Week in Sydney invited all scientists to embrace their treasured lab coats by wearing them with pride and parading everywhere. Scientists were spotted en masse and individually on buses, ferries and trains throughout Sydney,
- Genes of Bragg in Adelaide at the University of Adelaide. Baroness Susan Greenfield examined Australian Nobel Prize winning father and son, William and Lawrence Bragg, responsible for the science of X-ray crystallography. They won the Nobel Prize in 1915 and Lawrence Bragg, at 25, remains the youngest ever Nobel Prize recipient,
- Defying Gravity in Victoria at La Trobe University. Ron Elisha explored why the name Einstein has become a synonym for genius, and
- The Nuclear Energy in Australia Debate in Canberra. Dr. Colin Keay, Prof Aidan Byrne and Professor Michael Denborough discussed nuclear energy as an alternative to fossil fuels. This was moderated by Dr Pete Griffith, President of the Canberra Skeptics Inc.

Also, a number of AIP grant recipients ran their event during Science Week, including:

- The physics of the didgeridu which toured to Alice Springs, Darwin and Melbourne,
- Fred Watson spoke on astronomy,
- Scinema, the national science film festival, incorporated a student category with a physics theme, and
- Movies & the Moon in Townsville - astronomy viewings and physics related movies on The Strand.

3.7.2 EIYP-DEST contract requirements

The DEST contract for the Einstein Year funding required liability insurance and a premium of \$1,980.00 inclusive of all charges.

These details are included in Appendix 10.

3.7.3 Other

Extensive email correspondence with the Roger Richman agency has not revealed any copyright issues associated with the use of the name “Einstein” in any of the AIP Einstein International Year of Physics activities.

3.8 Promotion of the Australian government’s Malcolm McIntosh prize for physical scientist of the year

The Malcolm McIntosh Prize for Physical Scientist of the year, Dr Ben Eggleton, was a key note speaker at the AIP Congress in January 2005 - the first public event in the Einstein International Year of Physics. The meeting was very successful with over 950 physicists attending.

A news item was placed on both the AIP website and the Einstein Year website congratulating the winner of the Malcolm McIntosh prize and inviting AIP members, and those participating in the Einstein Year, to invite the winner to speak at their event if suitable.

The AIP website also lists past winners of the Prize leading to an increase in the number of invitations for winners to present talks at various functions. For example, Dr Howard Wiseman presented the final academic year key note colloquium at The University of Melbourne on 26 October 2005, as well as several national lectures titled ‘Einstein Explained’.

The AIP executive instigated a plan to use the AIP membership data base to create a list of under 35 year old members eligible for the Malcolm McIntosh Prize for 2005. On the basis of this exercise, the AIP encouraged two applications to be made.

Two past prize winners (Ben Eggleton and Marcela Belick) were invited to speak on the future direction of physics at the AIP Media Breakfast held the morning after the 2005 Prime Ministers Science Prize Dinner at Parliament House. Unfortunately they both declined due to prior commitments.

Following the AIP Media breakfast, a communication meeting was held with the Executive of the AIP. Both Ben Eggleton and Mark Butler (winner of the 2004 High School Science teachers Prize) were invited to participate. Ben was not in Canberra that week but did provide his thoughts on the direction the AIP should be going in with regard to communication.

Mark Butler did attend the meeting and provided some very valuable insights into physics education. Mark has joined the AIP national executive as Education Convenor and will be assisting with some of the projects planned in the area of physics education.

The AIP is planning a number of communication activities targeting students and teachers. Where appropriate, we will invite the past winners to participate in these events.

4 Highlight of achievements

4.1 Physics Congress

The AIP hosted the 16th Biennial Physics Congress in Canberra from 31 January to 4 February. There were 950 delegates from both Australia and overseas.

International speakers included: Profs Tony Leggett, Karsten Danzmann, Joachim Ullrich, Graeme Pearman, Steven Chu, Edwin Van Leeuwen, Catherine Cesarsky, Marcela Bilek and Helen Quinn;

Public forums included Industry Forum, School Outreach program, Humboldt Workshop, National Press Club Lunch, Sutherland lecture, the Time Warp Competition and the Young Physicist forum. A conference dinner was held at Parliament House with several politicians attending.

4.2 The seed grant scheme

The idea of the seed grant scheme was to assist smaller groups, individuals and organisations in sharing their passion for physics. This support for smaller groups extended the Einstein Year's reach far beyond expectations.

It showed how a small amount of support can spark off great things. The educational outcomes of the seed grant scheme, particularly with the involvement of major institutions like the CSIRO and ANU, shouldn't be underestimated.

4.3 flowvis

This exhibition was produced by a PhD student Melanie O'Byrne using a seed grant of \$2,400 and was displayed at the ANU School of Art during the Physics Congress in Canberra, January 2005.

There was a great response to the images including a number of media mentions. Mel received a number of enquiries as to whether the exhibition was going to tour to other venues and to use individual images.

Mel responded to these enquiries with the assistance of Sarah Brooker. Over the year, the exhibition went to Perth, Sydney and Koondrook in NSW, Adelaide, Canberra and Frankston in Victoria and was displayed in an electronic form in Brisbane and Hobart.

Individual images were used for the AIP postcard promotion and a Victorian Royal Society postcard promotion; advertisements for the AIP in *Cosmos* and in the gallery section of *Cosmo*; and the front cover of *Contact*, the journal for the Science Teachers Association of Victoria.

4.4 Melbourne Town Hall Event: Schools forum

AIP members made a substantial contribution to an all day Physics Form at the Melbourne Town Hall that attracted more than 1500 secondary school students from around Victoria. The event, held on July 25, was compared by the ABC's Bernie Hobbs. AIP funding was provided for the prize of the competition staged at the conclusion of the day.



Albert Einstein seen in Melbourne

The star of 1905 arrives on his bicycle. The 26 year old “Albert Einstein”, alias actor Ben Evans, arrives to entertain the crowd with his family snapshots and running commentary on his big ideas from 100 years ago.

5 Flow-on benefits attributable to the project including benefits to the AIP

5.1 Boost to physicists belief in their place in the world

The Einstein Year gave a tremendous boost to physicists pride in their discipline and vocation. Most physicists believe that their work contributes to understanding our world with a view to making a positive impact and improving the lot of humankind.

During Einstein Year, the recognition of physics and its importance to society, and the willingness of governments, media and the general public get excited and participate in all the years events has immeasurably enhanced the belief that physicist have in themselves, their profession and their discipline.

This will hopefully be reflected with increased student enrolments in school and university physics subjects. It should be noted that the DSTO/AIP honours scholarship applicants were of such a high standard and significant number that many more scholarships could have been made available to these most gifted of Australian physics students.

5.2 Better understanding of the impact of physics in all aspects of life and nature

Overall, the greatest benefit from the Year is the boost in public awareness that physics touches every person’s life- every day and in every moment. Simply, physics is understood better. Rather than being an esoteric field that only a genius can understand, the Einstein Year events revealed the simplicity that underpins all complex physics. It is so pervasive that no one person can escape the need to know a something of physics while accepting the impact it has on society, nature and even the economy.

5.3 Media breakfast

A physics media breakfast was held the morning following the PM's Science Prize in Canberra on Tuesday 4 October. This was promoted as a PM Science prize 'after party' for journalists and was sponsored by CSIRO and Questacon.

The breakfast was the first stage in getting journalists to think beyond Einstein Year to what physics has to offer society today, in five years, twenty years, one hundred years. The aim was not to generate news from the event but rather to get journalists to see the AIP and its members as relevant, useful sources of ideas and stories.

The breakfast was held at Questacon from 8am to 10am. After a brief introduction by Einstein, an actor from the Excited Particles (an in-house science theatre group at Questacon), six physicists spoke for five minutes each on the physics behind a current 'hot topic'.

The topics and speakers were:

- What's the universe made of? - David Jamieson, University of Melbourne
- The quantum revolution: using quantum properties for real stuff – John Close, ANU
- Climate change: the role of physics in addressing the issues – Bruce Mapstone, CRC for Antarctic Climate Ecosystems
- Clean Energy? The opportunities and challenges of nuclear power: fission and fusion – Aidan Byrne, ANU
- Big machines for big questions: why does Australia need the synchrotron, nuclear reactor and square kilometre array – Ian Smith, ANSTO
- Finding the next physicists – Mark Butler, physics teacher and winner of PM's Science Prize for teaching

There was full house attendance for the breakfast. Guests included journalists such as Wilson da Silva and Sara Phillips from Cosmos magazine, Gayle Jennings from ABC TV Factual and two journalists from The Age; the Director of Questacon and a number of education and exhibition development staff; members of the AIP and Phil Diprose from the science awareness program at DEST.

Speakers' notes were sent out to all invited journalists.

Questacon provided in-kind support of the venue and CSIRO Industrial Physics contributed some financial support for the event.

5.4 The continued success of *flowvis*

This grant recipient project has been successful beyond the scope of the original proposal. The exhibition was produced and displayed initially at the ANU School of Art during the Physics Congress in Canberra in January 2005.

Since then it has been displayed in:

- Adelaide at the South Australian Museum,
- Perth at Murdoch University and two high schools,
- Electronically shown during Science Week in Tasmania and Brisbane
- Canberra at the Canberra Shopping Centre
- Parliament House in Canberra during the PM Science Prize on 4 October.
- Cube37, a gallery in Frankston Victoria over November.

And next year, *flowvis* will head over to WA to the Miner's Hall of Fame in Kalgoorlie for March and April. The gallery Cube37 are interested in hosting the exhibition again where they will invite students to produce their own pieces of art in response to the images.

Some of the images from the *flowvis* exhibition also appeared in the October edition of *Cosmos* in the Gallery section.

There has been continuing interest in *flowvis* and in acquiring individual images from the exhibition. The AIP are investigating ways to continue the use of the images – perhaps as posters or postcards - in 2006.

5.5 mc2 wine

Rymill Coonawarra has a particular wine label called “mc2”. The company donated some bottles of wine to the AIP which were used as thank you gifts for speakers and helpers.



Lively wine for lively physicists.

Nick Nicola (blue lab coat) and Steven Damen (once-white lab coat) have been performing physics demonstrations at the University of Melbourne as part of the Einstein International Year of Physics. They are being thanked for their effort by Professor David Jamieson, President of the Australian Institute of Physics.

5.6 Benefits to the AIP

5.6.1 Membership

During 2005, membership of the AIP increased from 1366 to 1549 i.e. 13.3%. Furthermore new membership applications increased from 89 to 183, i.e., increased by two times.

5.6.2 Improved professionalism in the operation of the AIP

During 2005, the AIP was able to use professional assistance in the development of media strategies which had been previously undertaken by volunteer scientists. Although the volunteers were always enthusiastic, they did not have the professional expertise that ensured effective press coverage and event organisation/coordination.

The AIP also used a professional design contractor to create the banners, posters, postcards, letterhead, magazine lay-out and merchandise launched at the end of 2005.

The AIP executive also introduced changes after consultation of member preferences through some ‘market research’.

Furthermore, with the introduction of our new treasurer, the AIP improved and updated its financial transactions management and record keeping. AIP also improved its implementation of contracts and undertook a review of all existing contract arrangements which will lead to a ‘renewal of tender’ call for the magazine publication.

5.6.3 Re-imaging AIP

The AIP used the Einstein Year to upgrade its image. This was achieved through banners with artistic flare, redesigned letterheads and a reimagined magazine, now renamed *Australian Physics*.

5.6.4 Increased media exposure

During 2005, the AIP increased its media exposure significantly. There was clear identification of the AIP (and DEST) at all Einstein Year events. This has created closer and ongoing relationships with various science specific journalists as well as the general industry.

5.6.5 Increase in active members

During 2005, with the expectation that each branch was to organise various events such as the lecture series, many more members were actively involved. Anecdotal evidence suggests that active member numbers tripled during 2005.

5.6.6 DSTO/AIP honours year scholarship

As a result of the Einstein Year, the DSTO approached the AIP to implement two honours year scholarships in physics. Each scholarship is worth \$15,000. DSTO and the AIP have entered into a contract for the next three years.

The first year scholarships have been decided and the winners are: Yakov Kulik of UNSW and Jolyon Bloomfield of ANU.

5.6.7 Merchandising

The AIP has also introduced a range of shirts, ties, scarves and mugs for members to purchase. This encourages a sense of community and pride in being a physicist. These items can also be used as gifts for visiting speakers.

5.6.8 Stickers “Physics Inside”

The AIP printed stickers with the words “physics inside”. These stickers have been given out at all AIP and Einstein Year events and have been very well received. The stickers are aimed to be placed on almost any object to raise awareness that physics is all around us.



5.6.9 Re-design of AIP Magazine

The AIP magazine has been redesigned for the Einstein Year. With the launch of the first issue a copy of the Einstein Year poster was included.

With the second issue in the new design a copy of the Craig Savage Einstein DVD was included on the front cover. This DVD was funded from the DEST grant in the first round of the Einstein Year seed grants.

5.6.10 Increased recognition for Australia’s William Sutherland

Prior to 2005, the name and accomplishments of William Sutherland have almost been lost to history. But thanks to the Einstein Year campaign, the work of William Sutherland, who independently discovered and published one of Einstein’s revolutionary ideas more than a year before Einstein, is now much more widely known both within Australia and overseas.

6 Financial report

Available as a separate document.

7 Future prospects: Beyond Einstein

A communication workshop was held in Canberra the day following the PM's Science Prize and the morning of the physics media breakfast, Wednesday 5 October. In attendance were: David Jamieson, Cathy Foley, Peter Johnston, Scott Martin, Mark Butler, Sarah Brooker and Niall Byrne.

The aim of the meeting was to discuss how to build on the increased awareness of physics created during the Einstein Year and how to continue raising awareness of the role physics plays in our everyday lives.

Ideas were collected from AIP committee members ahead of the meeting. One of the key items that arose from the meeting was the need to engage with and better support teachers of physics at our high schools.

These ideas will be expanded into a communication strategy for the AIP in 2006 and beyond.

(See also the appendices in a separate document.)