



PHYSICS IN IRELAND



The newsletter of the Institute of Physics in Ireland

Series 5, Number 13, May 2005

A message from the IOPI chair

It is an exciting, if somewhat challenging, time to take on the role of chair of the Institute of Physics in Ireland (IOPI). As I said to those present at the recent AGM, I feel honoured to have been asked to do the job. The work of the IOPI is a team effort and I am extremely fortunate in having the support of an enthusiastic and committed committee who, of course, do most of the work.

We have just celebrated our 40th anniversary and, at the special anniversary dinner held during the Spring Weekend, it was great to see some of those past officers and committee

members whose enthusiasm, vision and selfless work have contributed so much to making the IOPI the vibrant organization that it is today.

It is up to the present committee to continue that good work as we strive to promote physics education and research, to develop links with sister organizations, with government and industry, to be more influential in policy issues and to be responsive to the needs of all of our members. I would like to record my special thanks to the two most recent chairs, Martin Henry and Julie Corbett, for their work in



developing the *Strategic Plan 2005–2008*, which you will have received along with the April issue of *Physics World* and

which will guide the work of the committee in the coming months. This year, World Year of Physics, in which we celebrate Einstein and Hamilton's work, promises to be a very exciting and busy time. On behalf of the committee I ask you all for your support.

In this issue of the newsletter you will find a report and photographs from the Spring Weekend and the 40th anniversary dinner and you will get a flavour of some of the ongoing activities in Einstein/Hamilton Year. Enjoy. **Martin Lamb** Chair, Institute of Physics in Ireland

Science 2005 celebrates past, present, future

Science 2005 was launched on 15 February in coincidence with the first meeting of the Cabinet Committee on Science and Technology.

"Science 2005: celebrating past, present and future" is a joint project of the Institute of Physics in Ireland (representing Ireland in the celebrations for International Year of Physics, under the banner "Einstein Year 2005") and the Royal Irish Academy (celebrating the bicentenary of Hamilton's birth, under the banner "Hamilton Year 2005: celebrating Irish science").

The project is funded by Discover Science and Engineering and aims to coordinate and develop Einstein Year and



Fennell Photography 2003

"Science 2005: celebrating past, present and future" was launched on 15 February with a photocall in front of Government Buildings. Left to right: Niamh Morris (Science 2005 programme coordinator), Prof. Martin Henry (chair of Institute of Physics in Ireland), Rebecca Gageby (administrative officer, Royal Irish Academy), Prof. Luke Drury (DIAS and the Royal Irish Academy), and Alison Hackett (Institute representative, Institute of Physics in Ireland).

Hamilton Year events for 2005 in order to draw attention to Ireland's proud scientific heritage and the exciting world-class science that is being undertaken in Ireland today.

The launch included a photocall in front of Government Buildings, Dublin, with the Taoiseach, Bertie Ahern TD, and the members of the Cabinet Committee on Science and Technology.

The full calendar of Einstein Year and Hamilton Year events can be found on <http://www.science.ie/> (click on the Science 2005 logo). A copy of the list of events taking place can also be obtained from Niamh Morris (e-mail n.morris@ria.ie; tel. 01 638 0922).

Visit the branch website at <http://ireland.iop.org>

Lab in a Lorry seeks volunteers for hands-on help

Lab in a Lorry launches at the 2005 Balmoral Show in Belfast (11–13 May; visit <http://www.balmoralshow.co.uk> for more details) and continues with a tour of Northern Ireland in May and June. Tour dates and locations are shown right.

Lab in a Lorry is an interactive mobile science lab that aims to enthuse the next generation of scientists and engineers by giving young people (11- to 14-year-olds) the opportunity to



explore real science through state-of-the-art hands-on experiments (see <http://www.labinalorry.org.uk>). The Northern Ireland tour has been arranged and supported by Sentinus.

Lab in a Lorry will be launched in the Republic of Ireland at the 2005 BA Festival held at Trinity College Dublin (5–9 September, see <http://www.the-ba.net/the-ba/Events/FestivalofScience>), and will tour Waterford, Cork and Galway.

The Lab in a Lorry project is currently looking to recruit volunteers to staff the lorry in September. The work on offer involves testing and demonstrating experiments; helping visitors; assisting with the nuts and bolts of the operation; and contacting local schools to host the lorry.

Volunteers are asked to contribute in a manner and at a level that suits them. If your training is in physics, engineering, mathematics, chemistry or a related field, please join us.

Volunteers for Lab in a Lorry are organized by the programme manager, who is coordinating all of the activities.

To obtain more detailed information on how to become a volunteer, visit <http://www.labinalorry.org.uk/volunteers.html> and get in touch with one of the people listed for the Republic of Ireland tour.

LAB IN A LORRY TOUR DATES

Northern Ireland tour

11–13 May
Balmoral Show, Belfast
Contact: Sentinus,
tel: 02892 627755

14 May
Ulster Air Show, Newtownards
Contact: Sentinus,
tel: 02892 627755

16–18 May
Sacred Heart Grammar School, Newry
Contact: Paul Kane,
tel: 02830 264632

19–20 May
St Louis Grammar School, Kilkeel
Contact: Kieran Quail,
tel: 02841 762747

21 May
Northwest 200, Coleraine
Contact: Denise Gault,
tel: 02827 663066

23–25 May
Foyle & Londonderry College
Contact: Sandra O'Connell,
tel: 02871 269321

26–27 May
Omagh Academy
Contact: John Cairns,
tel: 02882 242688

28–29 May
National Country Sports Fair, Moira
Contact: Sentinus,
tel: 02892 627755

30–31 May
CBS Omagh

Contact: Jim Murray,
tel: 02882 243567

1–2 June
Devenish College, Enniskillen
Contact: George Elliott,
tel: 02866 322923

3–4 June
Ballymoney Agricultural Show
Contact: Denise Gault,
tel: 02827 663066

6–10 June
Dalriada Grammar School, Ballymoney
Contact: Denise Gault,
tel: 02827 663066

11–12 June
Irish Country Lifestyles Festival, Shanes Castle
Contact: Sentinus,
tel: 02892 627755

13–15 June
St Patrick's Academy, Dungannon
Contact: Fintan Donnelly,
tel: 02887 727400

16–17 June
ECOS Centre, Ballymena
Contact: Alastair Walker,
tel: 02825 664400

18–19 June
Greenmount Country Show, Antrim
Contact: Sentinus,
tel: 02892 627755

20–22 June
Methodist College, Belfast
Contact: Michael Forsythe,

tel: 02890 205205

23 June
Young Innovators Exhibition, Odyssey Arena, Belfast
Contact: Sentinus,
tel: 02892 627755

24–25 June
Corporate Games, Belfast
Contact: Sentinus,
tel: 02892 627755

Republic of Ireland tour

5–9 Sept
BA Festival, Trinity College Dublin
Volunteers and schools/visitors
contact: Eleanor Cooke,
e-mail: eleanor.cooke@dcu.ie,
tel: 01 7008977

12–16 Sept
Waterford Institute of Technology
Volunteers contact:
Claire Keary,
e-mail: ckeary@wit.ie,
tel: 051 302057
Schools/visitors contact:
Eleanor Reade,
e-mail: ereade@wit.ie,
tel: 051 302037

19–24 Sept
NUI Cork
Contact: Anne Cronin,
e-mail: ae.cronin@ucc.ie,
tel: 021 4903299

26 Sept – 1 Oct
NUI Galway
Contact: Gary Gillanders, e-mail:
gary.gillanders@nuigalway.ie,
tel: 091 492529

Stamps for World Year of Physics

2005 has been designated UNESCO World Year of Physics, and to honour this occasion *An Post* has issued a stunning collection of three stamps, which are unusual in both colour and shape.

The 65 c Einstein stamp honours the centenary of Albert Einstein's "annus mirabilis" 1905; the 48 c stamp honours the bicentenary of William Rowan Hamilton's birth; the 60 c stamp contains an image of the

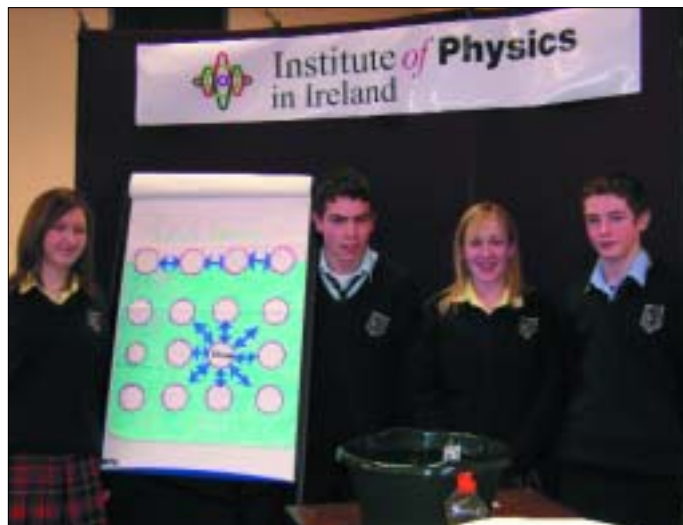


Clockwise from above: the 65 c stamp commemorates Einstein's "annus mirabilis"; the 48 c stamp honours the bicentenary of Hamilton's birth; and the 60 c stamp marks World Year of Physics.

United Nations building and honours World Year of Physics. The stamps can be purchased at your local post office, or

online by visiting <http://www.irishstamps.ie/> (click on Stamp Shop/Stamp Issues/World Year of Physics).

Irish winners meet their match in the Paperclip Physics final



The winning Paperclip Physics team from the Republic of Ireland was from Scoil Mhuire, Strokestown, Co. Roscommon. Left to right: Eilish Duke, Niall O'Connor, Marion Kelly, and Andrew Duignan, pose with their project "Surface tension".

Household items such as washing-up liquid, cardboard, pepper, paperclips, wire, weighing scales, skateboards, CDs and even stiletto heels were used in combination with creative dialogue and dramatic presentation to great effect at the Paperclip Physics competition heats and branch final this year.

This is all part and parcel of the way Paperclip Physics

communicates the same old physics in new, innovative ways. From 43 teams – which entered the competition from all over Ireland and competed in local heats at Cork Institute of Technology, Dublin City University and Queens University Belfast – eight teams came through to the branch final at University College Dublin on 8 March. An extremely high standard was evident in all of



The winning Paperclip Physics team from Northern Ireland was from Omagh Academy. Left to right: Shirley McCay, Claire Buchannan, Jason Marshall, Jonathan Flemming, Vanessa Jobb, pose with their project "Physics around the fairground".

the presentations, and after much deliberation the winning teams were chosen: from Northern Ireland, "Physics around the fairground" presented by Omagh Academy, Omagh, Co. Tyrone; and from the Republic of Ireland "Surface tension" by Scoil Mhuire, Strokestown, Co. Roscommon.

These two teams went on to the Institute's Paperclip Physics grand final, which was held for

the first time at the Thinktank Science Museum in Birmingham – a superb venue according to all reports. Some 13 regional finalists from the UK and Ireland competed, but unfortunately neither team from Ireland took the top prize. This honour went to Altrincham Girls Grammar School in Manchester for their presentation "How stars are born".

Alison Hackett

And then there were three: Teacher Network appoints new coordinator

Siobhan Crowe from Dominican College in Wicklow, Co. Wicklow has been appointed as the third Teacher Network coordinator for Ireland.

Crowe graduated from the University of Limerick in 2001 with a degree in science education. She teaches Leaving Certificate physics, biology and mathematics, and Junior Certificate science to all levels. Crowe joins coordinators Vida Given and Paul Nugent who were appointed in 2003 (see Autumn 2003 IOPI newsletter).

The Teacher Network was

established by the Institute of Physics (IOP) with the aim of providing support for those involved with the teaching of physics at an individual level whether it is to primary children or third-level students. It aims to engage with as many science and physics teachers as possible to help improve the experiences that students have.

The three Teacher Network coordinators in Ireland are developing objectives to aid them in developing the network. They are trying to organize for experienced teachers to come



Siobhan Crowe joins Vida Given and Paul Nugent as Teacher Network coordinators.

together, share information, and develop skills. The network aims to develop a community for

physics teachers to help avoid the feeling of isolation that some teachers may experience being the only physics teacher in a school or an area.

Not only is the network aiming to help the experienced, but it is there to provide resources for newly qualified teachers and non-physicists. At present the Institute of Physics is developing a set of CD-ROMs to help such individuals.

Ultimately the network is working towards enhancing the educational experience of science students, with the goal of increasing their level of interest in the subject and therefore the numbers that enter third-level physics courses.

Celebrating Einstein, Hamilton and

This year's Spring Weekend Meeting, held on 18–20 March in the Keadeen Hotel in Newbridge, Co. Kildare, had the subtitle "Celebrating Einstein and Hamilton" to mark 2005 as the centenary of Albert Einstein's "annus mirabilis" in 1905 and the bicentenary of the birth of William Rowan Hamilton.

The conference also featured the 40th anniversary dinner, which celebrated the contribution of many dedicated physicists to the Institute of Physics in Ireland (IOP) and the promotion of physics in Ireland over 40 years. More than 90 physicists – including 33 students presenting posters – made their way to Newbridge, and enjoyed the excellent contributions by the invited speakers, the summer weather on Saturday, and the excellent conference and catering facilities provided by the Keadeen Hotel.

A number of notable speakers from Ireland and abroad talked about how the work of Einstein and Hamilton has influenced physics in Ireland and elsewhere up to the present day. The conference started with a session on Bose–Einstein condensation and relativity.

Prof. Rudolf Grimm (University of Innsbruck, Austria) lectured on molecular BEC and the crossover to a fermionic superfluid, giving an exciting account of the recent developments in that field. Prof. Siddharta Sen (Trinity College Dublin) gave an excellent presentation on the status of field theory and string theory, under the title "Einstein's dream of a unified theory".

The Optics & Life session took place in conditions more suited to a summer conference in France; the external doors were open to allow warm air and shafts of sunshine to fill the room. The talks covered a range of topics from optical imaging at high resolution by Dominic Zerulla (University College Dublin) to the tailoring of molecules for photodynamic therapy by Donal O'Shea (University College Dublin) and new methods in nuclear

medicine by Geraldine O'Reilly (St James's Hospital, Dublin).

On Saturday afternoon, 33 posters presented by postgraduates from all over Ireland attracted great interest. The winners of the poster competition were: first prize, Jim O'Doherty (University of Limerick) – Tissue viability measurements for the assessment of microvascular events; second prize, Fiona Coyle (Dublin Institute of Technology) – Motor vehicle crush-depth measurements using close-range digital photogrammetry; and third prize, Robert Lynch (University of Limerick) – Porous layer formation mechanism of III-V semiconductors anodically etched in aqueous electrolytes. The winners were announced and presented with their prizes at the 40th anniversary dinner.

The session on Sunday morning focused on Hamilton and computational physics. Prof. Eoin O'Reilly (Tyndall National Institute, Cork) talked about the theory and modelling of semiconductor lasers. Prof. Luke Drury (Royal Irish Academy, Dublin) presented a talk on the biography and scientific achievements of Hamilton. The conference was closed with a talk by Prof. Jean-Patrick Connerade (Imperial College London) entitled "Einstein's doubts about quantum mechanics and how we still love them". He conveyed some of his profound insights into the interaction of atoms and light to the audience.

In keeping with its traditions, the Spring Weekend Meeting provided an excellent opportunity to interact with people on an informal level. Alison Hackett and John White (a postgraduate student at University College Dublin) proved themselves to be professional quiz masters (complete with Institute of Physics blinking magnets!) of the pub quiz held on Friday evening. More than 70 people participated, attempting to answer rounds of 10 questions in various fields. Here is a



Left to right: Peter van der Burgt (secretary 2001–2005), Prof. Rudolf Grimm (University of Innsbruck), and David Murnaghan (founding committee member 1964–1966, secretary 1966–1968) at the anniversary dinner.



The students greatly enjoyed the dinner.



Paul Nugent (IOP teacher network coordinator 2003–present) talks to Tony Scott (secretary 1977–1981, co-chair 1981–1983, chair 1983–1985). Tony Scott was recently elected Honorary Fellow of the Institute of Physics in recognition of his work on the Young Scientist competition. In the background Prof. Siddharta Sen (Trinity College Dublin) talks to Prof. James Slevin (committee member 1990–1991; president, Royal Irish Academy).



(Left) Corinne... first secretary 1973–1975, 2002–2005.



Prof. Colin Latimer (assistant secretary 1980–1983, co-chair 1983–1985, chair 1985–1987) talks to Prof. Bob McCullough (co-chair 1995–1997, chair 1997–1999).



Prof. Bob McCullough (co-chair 1995–1997, chair 1997–1999).

and the 40th anniversary of IOPI



enjoyed the summer weather during the coffee break on Saturday morning.



The postgraduate posters attracted a lot of interest on Saturday afternoon. Centre: John Costello (treasurer 1999–2001) talks to Prof. Jean-Patrick Connerade (Imperial College London).



Prof. John O'Toole, founding committee member and secretary 1964–1966, co-chair 1972–1973, chair 1974 and (right) Prof. Martin Henry (co-chair 2003, chair 2003–2005) cut the cake.



Jason Greenwood (treasurer 2001–2005) gave a speech at the anniversary dinner after receiving a gift for his work on behalf of IOPI from Prof. Martin Henry (co-chair 2002–2003, chair 2003–2005).



Left to right: Roy Johnston (founding committee member 1964–1968), Prof. Siddharta Sen (Trinity College Dublin), Prof. James Lunney (committee member 1993–1996), and Prof. Iggy McGovern (chair 2000–2001, co-chair 2001–2002).



Left to right: Prof. Frank Imbusch (co-chair 1974–1975, chair 1975–1977), Pdraig Dunne (chair of education subgroup 2001–present), and Sé O'Connor (secretary 1985–1989).



Prof. John McGilp (co-chair 1993–1995, chair 1995–1997) talks to Prof. Gordon Best (chair 1979–1981, chair 1981–1983). Behind Prof. Best is Charles Patterson (treasurer 1997–1999).



Julie Corbett (co-chair 1999–2001 and 2003–2004, chair 2001–2003) talks to Prof. Peter Smith (secretary general of the International Organisation for Medical Physics) at the anniversary dinner.

sample of the science questions:

Q: For what did Albert Einstein win the Nobel prize in 1921?

A: The photoelectric effect – for his services to theoretical physics, and especially for his discovery of the law of the photoelectric effect.

Q: How long does it take King Kong to fall off the 102-story, 380 m high Empire State Building?

A: If $g = 10 \text{ m/s}^2$, $\sqrt{76} = 8.7 \text{ s}$

Q: Of what rock do the thousands of columns of the Giant's Causeway consist?

A: Basalt. Approximately 60 million years ago volcanic eruptions forced molten basalt to the Earth's surface, which, as it cooled and contracted, formed the polygonal columns that are found today.

The most original (but incorrect) answer of the whole quiz was "Founder of the IOP", given to the question "Who is Humphrey Chimpden Earwicker?" The quiz was won by "The Relativists" consisting of Martin Henry, Aine Allen, Gabriel Gallagher, John Treacy, Liam Kelleher, and Eamonn Molloy.

Saturday afternoon was the time for leisure activities. Under clear blue skies, 14 people



Left to right: Eleanor Lewis, Martin Lamb (co-chair 2004–5, current chair), Prof. Ciaran Lewis (co-chair 1991–3, chair 1993–5), Howard Belcham, and Susan Lippmann (assistant director, Member Services, IOP).

joined the scenic hike in the vicinity of Blessington and climbed to the top of Lugnagun (446 m), providing panoramic views over the Wicklow mountains and the upper Liffey valley. Other people found their way to the National Stud and Japanese Gardens, and a few others played a round of golf.

The 40th anniversary dinner and preceding wine reception brought many committee members of the IOP – past and present – together.

Representatives from industry and other professional bodies included Prof. Peter Smith

(secretary general of the International Organisation for Medical Physics and recently retired chief executive of the Northern Ireland Regional Medical Physics Agency), Prof. James Slevin (president, Royal Irish Academy), Martin Catney (Andor Technology, Belfast), Graham Barber (Institution of Electrical Engineers), Melanie Kearney (secretary of the Royal Society of Chemistry), and David Moore (Astronomy Ireland). The IOP committee gratefully acknowledges Andor Technology, Belfast, for sponsoring the wine reception,

and Jean Finch for playing the flute during the wine reception.

After an excellent dinner, Prof. Frank Imbusch (chair 1975–1977) gave a presentation on the early years of the IOPI (then known as the Irish branch), including many pictures from his own collection of photographs. Prof. Martin Henry, Jason Greenwood, and Peter van der Burgt were officially acknowledged for their work done on behalf of the IOPI.

Accompanied by a bagpipe player, the anniversary cake was wheeled into the dining hall and the honour of cutting it was given to Conor O'Toole, the first secretary of the committee in Ireland. Delegates socialized until the early hours in the bar and the lounge, and in the dining room a few hardy souls danced to the music of Double Up.

The Spring Weekend Meeting proved to be a worthy celebration of Einstein and Hamilton and of 40 years of the IOPI, not least due to the excellent facilities provided by the Keadeen Hotel. We are looking forward with anticipation to the 50th anniversary, which will be cause for even bigger celebrations!

Peter van der Burgt

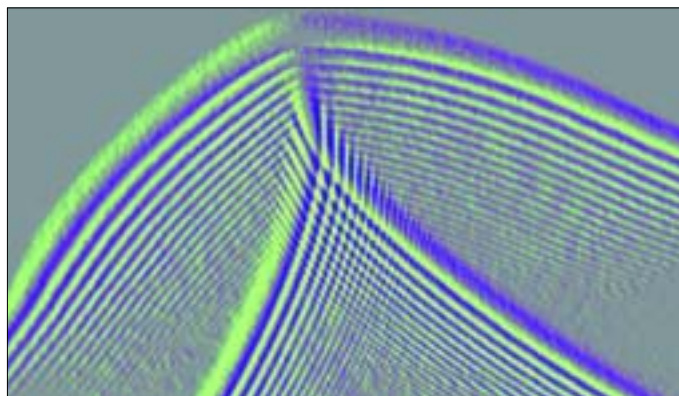
Beautiful physics phenomena are showcased in the City of Culture

A Café Scientifique entitled "Physics through pictures" was arranged on Monday 14 March at the beautiful new Glucksman Café in the Lewis Glucksman Gallery, University College Cork.

"Physics through pictures" was held to celebrate Einstein's birthday, just one event taking place due to Cork's European Capital of Culture status.

Prof. Sir Michael Berry of Bristol University showed the audience of 85 people – a mixture of scientists and people from other disciplines – images of beautiful natural phenomena, paintings, and striking computer graphics (with the bonus of some literature and poetry added in), to illustrate some of the abstract ideas in physics.

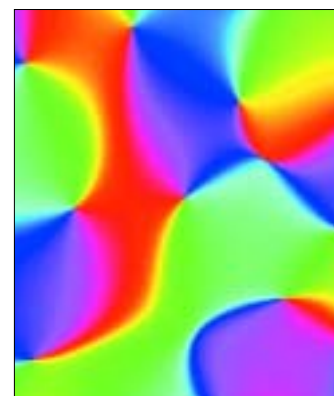
Many of the images were derived from the physics of



Bathroom waves (above) and random phases (right) were pictures used in Prof. Sir Michael Berry's talk.

light, for example, waves and rays as rainbows, light sparkling on the sea, bright lines dancing on the bottom of swimming pools, and the gravitational lensing of distant galaxies (as predicted by Einstein).

The audience greatly enjoyed the talk, not least because of the informal venue and excellent food provided. The main reason that most (64%) of the attendees said they came was that they were "already interested in



attending a science and culture/arts event". The British Council Ireland sponsored the event, in collaboration with the Institute of Physics in Ireland and University College Cork.

Alison Hackett

Galileo sparks science debate

Last February, the physics community was treated not only to Rough Magic's wonderful production of *The Life of Galileo* – a play set in the 17th century, that still resonates with any modern-day research scientist – but also to two public talks in association with the play.

The first public event was the most interesting and well choreographed presentation, "And yet it moves: Galileo and his legacy". Prof. Iggy McGovern (Trinity College Dublin), Ian Elliott (astrophysicist, formerly on the research staff of Dunsink Observatory) and Michael John Gorman (project director of the Ark's Arkimedia Project, see <http://artbots.org/2005/>), highlighted many of the fascinating, less well known details about Galileo's life and the struggle he experienced to have his theories accepted.

The second public event was



The Life of Galileo is a play set in the 17th century that covers themes that are still relevant to every modern-day research scientist.

an interactive debate "Science friction: a panel discussion on science, politics and the state".

The panel, superbly chaired by Dermot Gleeson (chairman of the Irish Council for Bioethics), included Barry McSweeney (Government's chief science advisor), Brian Trench (head of School of Communications, Dublin City University), Prof. Antonino Zichichi (president of the World Federation of Scientists; also known as the Pope's astronomer), Prof. Emer Coleran (director of the Environmental Change Institute, NUI Galway) and Lynne Parker, (director of *The Life of Galileo*).

Much of the discussion was spent on who dictates how research funds should be spent and how they should be allocated. McSweeney highlighted the dangers of focusing research spending too much on industrial needs.

Alison Hackett

Dubliner is poetry contest runner-up

The physics poetry competition Universe, part of the Einstein Year celebrations, has selected a runner-up from Ireland.

Noel Duffy, a former physics student from Trinity College Dublin, wrote the poem "The

Moons" shown below.

Duffy was co-editor of *Watching the River Flow: A Century in Irish Poetry* in 1999 and winner of the Start Chapbook Award in 2003 for his collection *The Silence After*.

He studied physics at Trinity College Dublin in the 1990s and is currently a full-time writer.

For more information on the competition's winning poems, go to <http://www.einsteinyear.org/about/media/universewinners>.

IOPI publishes strategic plan

The *Strategic Plan 2005–2008* was mailed to all members with the April issue of *Physics World*. Members who would like an additional copy or have comments on the strategy are asked to contact Sheila Gilheany, Institute policy officer (e-mail: sheila.gilheany@dcu.ie; tel: 01 700 7789).

The Moons

He has waited all day for the light to fade
as carts and carriages rattled by
in the courtyard
below his window, the shouts of traders
in the market-place filling the air till dusk.

Now all has grown quiet in the narrow streets
as Orion climbs from the south
and the Cathedral bell intones
the solemn note of the Angeles over Padua.

He warms his hands by the dying embers of his fire,

then aims his telescope above the rooftops

of the Merchants houses on the square,
high above their world of commerce and trade,
their balanced ledgers and numbered hours.

And how, on looking closer, the sky explodes
in the viewfinder, the night more profligate
than he could've ever imagined it,
the Seven Sisters, shimmering and familiar,

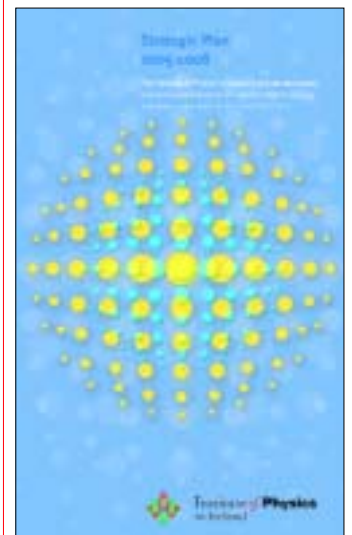
rising above the horizon and Jupiter, brightest point
in all the darkness overhead,
swims into focus
its four moons fixed in their circuits,
circling like ghostly presences

across the shifting weather of another planet. Such strange seasons
he has witnessed in the heavens but none like this
giant storm churning in the distance, its blooded iris
searching him out across the empty spaces

as though it were the eye of God that had found him
framed in this window, his failing sight
his only proof against all ignorance and doubt
that sometimes the heart can miss a beat

and is never quite the same after.

Noel Duffy



Posters win prizes

In celebration of International Year of Physics and Einstein Year, Esat-BT and the Institute of Physics in Ireland invited primary school children to design a poster for 2005.

The winning posters were displayed at the Esat-BT Young Scientist and Technology Exhibition 2005.

First prize was won by the 2nd class of Harolds Boys National School in Dalkey, Co. Dublin (teacher Alice Ford). Second prize was shared by Clara Mannion, Claire Parsons, Celine Gregory and Sheena Malone, who submitted individual posters. All four students are from Scoil Mhuire in Urán Mór, Co. Galway (teacher Mr Duggan).



The winning Einstein Year poster.

Dublin imparts Irish flavour to High-Energy Particle Physics conference

Particle physics has experienced something of a renaissance in Ireland of late. The re-establishment of an experimental group at University College Dublin (UCD), together with the many theoretical groups around the country, continues to make the case for Irish membership of CERN, the European Centre for Particle Physics.

Last month, 200 particle physicists came to Ireland for the annual conference of the Institute of Physics (IOP) High-Energy Particle Physics (HEPP) group, which was held at UCD on 21–23 March. This conference usually takes place during the Easter break in the UK, so we were particularly happy that UCD was chosen as the venue this year, that it was the first time the conference had been held in Ireland, and that so many people made the short hop across the water.

The meeting had something of an Irish flavour, both during the academic sessions and afterwards in the social programme. Steve Myers, originally from Belfast and now head of the beams division at CERN, spoke about preparations for the Large Hadron Collider (LHC), due to start data-taking in 2007. James Stirling, another Irishman and director of the Institute for Particle Physics



Roger Barlow (left), HEPP group chair, and Nick Jelley (Oxford University), HEPP group prizewinner, with two Irish dancers at the Jameson Distillery.

Phenomenology at Durham, presented the status of physical predictions for physics processes at the LHC.

Martin Grünewald of UCD gave a review of experimental electroweak physics results. More than 60 presentations were made in the parallel sessions; the opportunity for young physicists to present their research in this way is one of the features of this conference.

John Ellis, head of non-member state relations at CERN, presented the provocatively titled talk: “Can particle physics shed light on the dark secrets of

the universe?”. However, he had nothing to say on the art of brewing Guinness, and so we moved to the conference dinner.

Fearful of the accusation that we couldn't organize a p*ss-up in a brewery, the conference dinner was held at the Jameson Distillery where we were treated to some excellent traditional music and dancing.

As can be seen in the photograph, the dancers took time out to congratulate Nick Jelley of Oxford University on being awarded the IOP HEPP group prize.

Ronan McNulty

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The deadline for your contributions to the next issue of this newsletter is:

Monday 1 August 2005

Please e-mail your materials to peter.vanderburgt@nuim.ie