

Institute of Physics in Ireland Annual General Meeting

2 Apr 06 Great Northern Hotel Bundoran

Summary Report

Einstein Year

The year 2005, celebrated as both Einstein Year and Hamilton Year in Ireland, was made remarkable by the many and varied events held all around the country reaching out to thousands. The highest level of interest and excitement was evident in areas where the public could connect their own interests, such as in the arts, sports, politics and philosophy, and make a new engagement or understanding in relation to the physics being communicated. Highlights included the great enthusiasm for the sports and radar challenges at the Kit Kat all track and field events in Tullamore, the hands on experiments on Lab in a Lorry, the debates on 'Science Friction' accompanying the 'Life of Galileo', the fascinating argument about who discovered calculus in the staged reading of Carl Djerassi's play 'Calculus' at Trinity College Dublin, the human equation $E=Mc^2$ shown on the main evening news, the silence of hundreds of students held spellbound at the Tyndall lecture 'Inside Einstein's Universe' and the beautiful swirling images of soap films in the exhibition by Tim Durham. Some of the most valuable prospects resulting from this remarkable year have been in enhancing our associations with professional and science related bodies such as Discover Science and Engineering, with science journalists and communicators, and on a more individual level with our members and many other supporters from all sectors of education, industry and the wider community.

Annual Activities

The IOPI touring lecture programme, the spring weekend meeting and the IOPI annual awards form a core part of the structure of IOPI activities for each year and the quality of these has been higher than ever this year, supported as usual with great professionalism by the Representative in Ireland. Lecturers included prestigious speakers from academia and industry from across the world covering a broad selection of research and innovation of the highest standard. The co-operation of the third level institutions in supporting this programme is superlative. The spring weekend management, 'stepped up' this year to include online registration and with great support from the conference department at headquarters, is now reaching the professional level expected by participants. The support from Sligo IT for the conference at local level this year has been invaluable. The annual awards and medals pay tribute to the highest levels of achievement in physics by school students, teachers, undergraduates and postgraduate researchers.

Policy

In former times, policy matters, due to the lack of staff and support in Ireland, had only been sporadically addressed, but, in the past year, they have been wholeheartedly embraced and advanced due to the excellent work of the recently appointed IOPI Policy Officer. Activities have included Heads of Physics meetings, industry with academia seminars such as 'Physics Meets Medicine', comprehensive representation of statistics relevant to physics at third level and research in Ireland and the preparation of detailed responses to regional, national and international consultations in areas as diverse as European funding, economic development, future skills and immigration issues for researchers. Collaborations and new contacts with other professional groups such as Engineering Ireland, Institution of Electrical Engineers, Royal Society of Chemistry, Irish Business Employers Confederation, Irish Medical Devices Association, Irish Medical

Physicists Association, Centre for Cross Border Studies and Irish Universities Association have been established. At government level, sustained contacts have enhanced the Institute's profile in a broad forum both in the Republic and in Northern Ireland.

The IOPI has recently taken over Irish membership of the International Union of Pure and Applied Physicists (IUPAP), The European Physical Society (EPS) and the International Commission on Optics (ICO). The position of research in Physics is one of the key concerns of the Institute and on joining these international bodies the Irish branch hopes to draw on the experience and knowledge of the other countries to address this.

Education

Second level and third level physics education support has been expanding with the hard work of the IOPI network coordinators and with the consolidation of the Education Group of the Institute of Physics in Ireland. Activities include second level in-service presentations and workshops, physics and science teachers' conferences, Paperclip Physics competition, the Tyndall lecture, the STAR physics website, new physics careers materials, CD teaching resources, literature reviews and email bulletins, to mention but a few.

Physics on Stage 3, the booklet of demonstrations that has been distributed to science and physics teachers through out the country, was launched with great honour by the Minister for Education in December. Science on Stage, the follow on to the Physics on Stage festivals, was held at CERN in Geneva last November. The Irish and UK delegations included the in-coming chair of the Education Group of IOPI and the three IOPI teacher network co-ordinators. The Irish team were highly honoured to receive a prize for their stand presentation 'Teaching Science as a Process'.

Both the teachers network and the Education Group, and their activities, go from strength to strength with exciting plans for the future including strengthening the network contact list, developing an affiliation and network scheme suited to Ireland, developing resources for physics teachers, in-service delivery of the 11-14 Supporting Physics Teaching Initiative and further collaboration and sharing of projects with groups such as the ISTA, Association for Science Education NI, the national physics co-ordinator, Junior Science support service, the Northern Ireland Teachers Panel, the Northern Ireland Science Education Forum (NISEF) and many more.

Industry

A major goal of the Institute is to increase interaction with industry. As a step towards this, the branch has been active in working with other representative bodies such as IBEC in identifying areas which can be addressed – eg increasing contact between academia and industry, collaborating on career development and promotion of science at school level. As part of this the branch is currently collecting statistics on the physics based manufacturing industry in Ireland.

The IOPI has benefited greatly this year from strong cooperation and coordination of work by the Chair and Officers, the Representative, the Policy Officer, the Teacher Coordinators, and the committee members. The active membership of over 1700 is the branch's greatest asset and we thank all of those who contribute in many ways to our work, while the ongoing co-operation with all the third level institutes and new support and shared projects with other bodies, ensures that the IOPI is in a position of strength to influence and guide physics in Ireland.