Press Release

17 November 2009

De Valera, Einstein, and the future of advanced research

Lecture: Saturday, November 21, 8pm, Trinity College, Dublin

What use is advanced research? Especially during a recession? Why has Barack Obama promised to spend more than 3% of GDP on research and development, and to treble the number of science research fellowships? And can advanced research help to re-position Ireland as a 'smart economy'?

It was during the depressed 1930s that a mathematician-turned-politician, Éamon de Valera, established the Dublin Institute for Advanced Studies (DIAS).

The DIAS was modelled on another institute born during another depression: Princeton's Institute for Advanced Study (IAS), established in 1930 in the aftermath of the great Wall Street crash. Funded by philanthropists, it was designed to help the US kickstart its 3rd-level programme for education and research, by generating ideas that would 'change how we think'. (DIAS remains exchequer-funded, but the founding legislation left open the possibility of an endowment.)

Fundamental to the vision behind both institutes was the belief that you change the world, not by following pre-set conventional lines, but in 'the pursuit of interesting things'.

It helps if your first faculty member is Albert Einstein – and Princeton tempted the Nobel physicist from Germany in 1932. Similarly, Dublin's first appointment was another big name Nobel physicist: Austrian emigré Erwin Schrödinger, who remained a professor at DIAS from 1939 until his return to Austria in 1956.

Significantly, the two institutes embraced both the sciences and the humanities from the outset. Princeton now has four schools – historical

studies, mathematics and physics, natural sciences, and social science – and Dublin has three: theoretical physics, cosmic physics and Celtic studies.

Combining theoretical physics and Celtic studies reflected de Valera's interests and vision for a modern Ireland – 'Hamilton's country', after the great Irish mathematical physicist of the 19th century – but also clearly reflects something more profound in human enquiry.

But what of the Princeton and Dublin institutes today, and other institutes like them around the world? And what is their role in modern research and education.

Noted English physicist Prof Peter Goddard, one of the founding figures of 'string theory' and current director of Princeton's IAS, will talk about the relevance of institutes for advanced studies on Saturday, November 20. His lecture is entitled: There are no excuses in paradise: the past, present and future of institutes for advanced studies.

This is part of de Valera's legacy: one of the institute's "statutory public lectures", as required under the 1940 Act which established DIAS, and part of the institute's ongoing programme of public engagement.

Goddard's mentor as a young scientist was Paul Dirac, another Nobel physicist. Dirac shared the 1933 Nobel prize with Schrödinger (see photo, and caption below) and was a frequent visitor to DIAS.

Saturday's lecture, scheduled for over a year, comes at a time when research funding is under intense scrutiny. But also in a year when US President Barack Obama reaffirmed his belief in fundamental research as "scientific capital".

Addressing the US National Academies of Science in April, Obama said: " . . . scientific discovery takes far more than the occasional flash of brilliance – as important as that can be. Usually, it takes time and hard work and patience; it takes training; it requires the support of a nation. But it holds a promise like no other area of human endeavour."

In another parallel with historic developments, two months ago, Taoiseach Brian Cowen, the current incumbent of de Valera's position, again looked to Ireland's rich tradition of cultural and scientific innovation when, addressing the Global Irish Economic Forum at Farmleigh, he spoke of the need to reposition Ireland for the future as a smart economy.

Ireland as an innovation nation must, he said, "think smarter, work smarter and be smarter". We need, not just to predict the future, but to invent it.

All are welcome to Saturday's lecture, and admission is free, however

arriving early is advised.

Image / Caption:
Photograph taken in Dublin in 1942, and showing in the front row (left) theoretical physicist Dr Sheila Power (later Tinney), one of the first women scientists elected to the Royal Irish Academy, with Nobel physicist Paul Dirac (3rd from left), who shared the 1933 prize with Schrodinger; Taoiseach Éamon de Valera (centre) and Prof Erwin Schrodinger (second from right).
A low-resolution version of the photograph is available here:
http://www.stp.dias.ie/history/1942.jpeg

For a high-resolution version, media representatives should contact the Registrar's Office: registrarsoffice@admin.dias.ie

PDF poster for the talk available here:
http://www.stp.dias.ie/events/2009/STP_SPL_2009.pdf

Event details:
'There are no excuses in paradise: the past, present and future of institutes for advanced studies', by Dr Peter Goddard, director of the Institute for Advanced Study, Princeton
When: Saturday 21st November 2009 at 8pm
Where: Walton Theatre, Trinity College, Arts Block, Nassau St, Dublin 2
All welcome / admission free

Media queries:
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