Preparing Ireland for Quantum – Irish Centre for High-End Computing (ICHEC) brings Prestigious European Quantum Technologies Conference (EQTC) to Dublin

Over 500 global experts in quantum technologies will descend on Dublin in November this year for the European Quantum Technologies Conference (EQTC) adding momentum to initiatives already taken by the Department of Business, Enterprise & Innovation (DBEI) in this emerging and strategically important field for Ireland. The event is the flagship event of the European Quantum Initiative, a €1 billion initiative launched by the EU in 2018 to bring together research institutions, industry and public funders, to expand European scientific leadership and excellence in Quantum.
Prof. Jean-Christophe (JC) Desplat, Director of ICHEC and Chair of the EQTC 2020 organising committee said,

“EQTC is an important stepping stone in positioning Ireland as an international global hub for quantum technologies and applications. Quantum computers will have the ability to solve complex problems that are beyond the capabilities of classical computers and will enforce the next genuine disruption to technical computing. The impacts of quantum computing will be significantly greater than those brought by supercomputers for key applications such as drug design, material science, financial services, digital security and potentially climate change studies”.

Researchers in Ireland are already working with industry on collaborative projects in quantum computing. Since 2018, ICHEC co-ordinates and runs the national Quantum Programming Ireland (QPI) Initiative which
focuses on developing expertise in quantum computing software and applications for practically-relevant solutions.

Dr. Venkatesh Kannan, Technical Manager at ICHEC and Co-Chair of the EQTC 2020 said,

“All projects under the Quantum Programming Ireland (QPI) initiative at ICHEC are in close collaborations with a number of Irish and international industry and research partners to explore potential applications in areas such as environmental pollutants, genomics, natural language processing, engineering design and financial services”.

“Today, practical quantum computing is at a nascent stage. This is a great opportunity for Ireland to pioneer this emerging field globally. For a small country like Ireland, the importance of a coordinated approach to build quantum software and applications, along with efforts on the science and engineering of quantum computing platforms is key. ICHEC and the Tyndall National Institute (TNI) are working together to steer this national coordination, and EQTC 2020 is a key platform to stage the Irish ecosystem and engage with the international quantum community”, Dr. Kannan said.

“It is important that Ireland presents a strong unified front to Europe and the rest of the world,” said Dr. Giorgos Fagas, Head of EU Programmes, Tyndall lead for the Quantum Computing in Ireland (QCoIr) project and a member of the EQTC 2020 Organising Committee.

“There is already a strong quantum technologies ecosystem in Ireland involving researchers enterprise and services in various sectors such as biotechnology, material sciences and financial services. We have been driving the establishment of a large scale Irish Quantum Initiative together with ICHEC and other partners to grow Ireland’s reputation in this emerging area. There is a natural synergy between our organisations where we develop the hardware solutions and ICHEC brings expertise in software and applications”, Dr. Fagas continued.

The European Quantum Technologies Conference (EQTC) is the culmination of a successful bid which took place in 2019 and was led by the Irish Centre for High-End Computing (ICHEC) and supported by DBEI, the Department of Transport, Tourism & Sport, Fáilte Ireland, IDA Ireland, and a number of academic and enterprise organisations.

“We are very excited about bringing the European Union’s flagship conference and the international Quantum technologies community to Dublin”, Prof. Desplat concluded.