

LuxQuanta becomes ICFO?s 10th Spin-off

New spin-off to exploit quantum technologies to provide the highest level of data security

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On May 13th, ICFO launched its 10th spin-off company, LuxQuanta. The official signature took place in Barcelona with co-founders of the spin-off company CTO Sebastian Etcheverry, Head of the Signal Processing Unit Saeed Ghasemi, and ICREA Professor at ICFO Valerio Pruneri, as well as ICFO Director Lluis Torner, ICREA Executive Director Emilia Pola, and ICFO's Knowledge and Technology Transfer Director Silvia Carrasco.

The technology and IP developed at ICFO in the Optoelectronics research group led by ICREA Prof Valerio Pruneri, which has now been transferred to LuxQuanta, exploits the unique properties of quantum physics to provide cryptography solutions to implement an extra layer of security for companies and telecommunication networks. Their main product consists of high-performance quantum key distribution systems to distribute a cryptographic key between users. The company's technology is cost-effective and ready to operate in

network environments.

CTO Sebastian Etcheverry comments, **i¿½The unprecedented computational power f quantum computers presents an enormous risk to some of the cryptographic algorithms e used today. The solution for this world-wide problem could come also from a quant m technology; Quantum key distribution. LuxQuanta's vision is to boost quantum k y distribution technology by providing a system with reduced implementation cost and hi h performance to protect digital data in the near future. Working with ICFO and its KTT te m has been an exciting process which has put us in an excellent position to provide saf r communication for society.i¿½**

Director of ICFO KTT, Silvia Carrasco comments, **i¿½We are extremely excited to s e LuxQuanta's launch. After many years of research, development and business effort , LuxQuanta's exceptional team is prepared to provide quantum solutions to better prote t digital data, a growing critical asset for organizations, infrastructures, industries, citizens a d our society at large.i¿½**

The research that gave rise to LuxQuanta received support from the European Regional Development Funds allocated to the Generalitat de Catalunya for emerging technology clusters devoted to the valorization and transfer of research results (QuantumCAT 001-P-001644, and InnDelta- 001-P-002223), from the Department of Digital Policies and Public Administration of the Generalitat de Catalunya (Criptografia Quantica en Comunicacions Critiques), from the Spanish Ministry of Economy, Industry and Competitiveness through the Severo Ochoa Distinction of Excellence, the European Commission through the H2020 FET Flagship on Quantum Technologies (CiViQ - No 820466), the Barcelona and Castelldefels City Councils, and the i¿½la Caixai¿½ Foundation.