

Mobile World Congress 2021

20,000 visitors from 117 countries and 100,000+ online attendees tune in for the latest updates of the mobile ecosystem

July 06, 2021

Every year, MWC brings together leading companies and trailblazers to share the latest topics relevant to the future of the mobile and tech ecosystems. After almost two years of a previously unimaginable worldwide pause on conferences and meetings, the Mobile World Congress (MWC) 2021 returned to Barcelona for an atypical event, formatted in a hybrid mode of in-person and virtual presentations.

From June 28 to July 1st, GSMA, the organizer of the world's largest mobile conference, put together a thorough and attractive agenda of presentations, talks, exhibitions and tech shows, spanning many different technological areas of the mobile and telecom industry as well as showing what is new to the market, giving the spotlight to companies such as Google, Samsung, TCL to unveil new products during the 4-day event. An estimated 20,000 people from 117 countries attended the event in-person while, in parallel, about 100,000 connected online to watch the different sessions and speakers.

ICFO participated in both the **NexTech** main track session of the event as well as in **4YFN**, the largest start-up event that runs parallel to MWC. These NexTech keynote talks, hosted and moderated by GSMA CEO **John Hoffman**, are 20-minute presentations that aim to show to a selected public of top investors and industrial representatives the new innovative and disruptive technologies that stand to change the future of the mobile ecosystem and have a major impact on society.

ICREA Prof at ICFO **Frank Koppens** was invited as one of the keynote speakers of this NexTech session. He gave a presentation focused on graphene and the achievements the European **Graphene Flagship** has accomplished throughout its almost ten years of life. He also showed the outcomes and applications that have emerged in various technological areas, demonstrating the impact that graphene and 2D materials have had as well as some of the spin-off and start-up companies that have been created thanks to the Graphene Flagship program.

Accompanying Koppens, **Tommaso Calarco**, in representation of the **Quantum Flagship**, the leading European initiative dedicated to Quantum Technologies and in which ICFO is particularly active, was also invited as keynote speaker within the same session. Calarco gave a presentation on the European initiative, launched in 2018 with a 1bn Euros budget. He showed the Quantum Flagship's achievements to date, the impetus that the European Union is applying to back all quantum programs around the region, and underscored the EU's motivated initiatives to position Europe as a front-runner in the worldwide race in quantum technologies.

In the 4YFN agenda, two ICFO spin-offs where given the spotlight in two different events focused on illustrating what quantum technologies are and what changes they will bring in the near, mid and long term future to industry, governmental institutions and society at large.

At the Connectivity Summit session, **Sebastian Etcheverry**, formerly researcher at ICFO and currently CTO of the spin-off LuxQuanta, gave an overview on the basics of quantum communication and quantum cryptography, secure communications, and how this will be implemented to deploy the future European infrastructure EuroQCI. He emphasised the QKD systems and the initiatives that are taking place both at the European level, through the projects CiviQ and QRANGE from the Quantum Flagship, and in Barcelona, through programs such as QuantumCAT and SmartCat, where there is an important initiative to deploy Barcelona-Q as a key node of the European Quantum Communication Infrastructure.

In the panel discussion i¿½From Bytes to Qbits: Opportunities of Unprecedented Computi

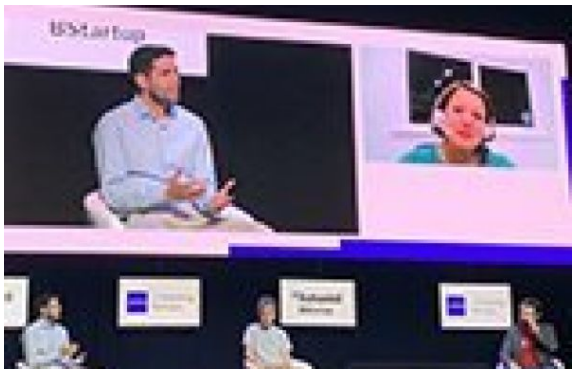
g Poweri¿½ICFO Alumnus **Carlos Abellan**, currently founder and CEO of spin-off Quside, joined **Sergio Gago**, Co-Founder & CEO at Qaptain Quantum, **Artur Garcia Saez**, Co-Founder & Software Architect at Qilimanjaro Quantum Tech, and **Denise Ruffner**, VP of Business Development of IONQ, for an enriching and very broad conversation about new quantum technologies. They covered a wide range of hot topics such as quantum computing (architypes, systems, supremacy, etc), quantum cryptography, and how quantum random generators are technology providers of ultra-secure quantum communications. They also discussed the potential for applications of quantum technologies with new industrial partners and companies, outlining clear and realistic expectations for the future of this field.

MWC2021 demonstrated the feasibility of hybrid events of very large dimensions. From the positive response seen from the audience, both in-person and online, this has generated confident expectations in all the organizing bodies of the event, in particular GSMA, that MWC 2022 will undoubtedly take place at the beginning of 2022 and will return to be the best and largest mobile conference to be held worldwide. So stay tuned until next year!



(L to R) Tommaso Calarco- Quantum Flagship; John Hoffman- GSMA; Frank Koppens- ICFO


Sebastian Etcheverry, CTO of ICFO Spin-off LuxQuanta at the Connectivity Summit


Carlos Abellan, founder and CEO of Quside in the