

Mr. JUAN IGNACIO CIRAC SASTURAIN Member of the Board of Directors of Telefónica, S.A.

Born in Manresa (Spain) in 1965.

Ph. D. in Physics, Universidad Complutense de Madrid. Fields of Specialization in Quantum Optics, Quantum Computing and Communication.

Regarding his professional experience, it is worth stressing: Member of the Security Advisory Council of Telefónica Ingeniería de Seguridad; Member of the Advisory Boards of Telefónica Tech; Member of the Scientific Advisory Board of the La Caixa Foundation; Co-Director of Center for Quantum Sciences and Technologies Munich (since 2019); Director of International Max-Planck Research School Quantum Science and Technology (since 2016); "Honorarprofessor", Technical University of Munich (Department of Physics) (since 2002); Director of the Theory Division, Max-Planck Institut für Quantenoptik and member of the Max- Planck society (since 2001); Professor, Institut für Theoretische Physik, Leopold Franzens Universität Innsbruck (1996-2001); "Full Profesor", Applied Physics Department, Castilla La Mancha University (1991-1996).

Among other activities, has served on advisory boards and scientific committees of several international research centres in the United States (Harvard, Maryland, MIT), Asia (Kyoto, Tsinghua, Singapore) and Europe (Switzerland, Russia), as well as the BBVA Foundation. He has also been a member of the Editorial Board of several national and international Physics journals, and is Editor and Founder of the journal Quantum Information and Computation.

Among the awards received, the most noteworthy are the following: Quantum Computing from the Micius Foundation (China); John Bell from the University of Toronto; Max-Planck, of the German Society of Physics; Wolf of Physics; Benjamin Franklin, of the Franklin Institute, US; BBVA Foundation Frontiers of Knowledge Award; Carl Zeiss; National Blas Cabrera; Quantum Communication; Prince of Asturias Award for Technical and Scientific Research; Quantum Electronics of the European Physical Society; Felix Kuschenitz Prize of the Austrian Academy of Sciences.

Other Honors including: Honorary Ambassador of Marca Spain; Elected member of the Royal Academy of Sciences, Spain, German Academy of Sciences (Leopoldina) and of the Bavarian Academy of Sciences; Medal of Honour of the Niels Bohr Institute; Gran Cruz de la Orden del Dos de Mayo de la Comunidad de Madrid; Premi Nacional de Pensament i Cultura Científica; Doctor Honoris Causa of the University

of Buenos Aires, the European University of Madrid, of Zaragoza, of Valencia, of Castilla-La Mancha and the Polytechnic Universities of Valencia and of Catalunya.
