UNIVERSIDAD DE GRANADA

SHORT_CV_DANIEL_RODRÍGUEZ

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He did his PhD at GSI Darmstadt (Germany) from April 1999 to November 2003, building the SHIPTRAP (Penning trap) facility for mass measurements on superheavy elements (SHEs), and occasionally he was at CERN for mass measurements with the ISOLTRAP facility. He defended his PhD thesis "An RFQ buncher for accumulation and cooling of heavy radionuclides at SHIPTRAP and high precision mass measurements on unstable Kr isotopes at ISOLTRAP" in November 2003 at IFIC-CSIC in Valencia. In January 2004, he moved to Caen (France) to work as a postdoctoral researcher at LPC (January 2004 - September 2006), where he was responsible for the commissioning of an ion trap facility at GANIL. In France, he also obtained a Marie Curie Individual Fellowship (2005-2006) with the project "Standard Model Tests Using Beta Decay and a Novel Transparent Paul Trap". Back in Spain, he joined the MATS collaboration (Penning traps) at FAIR (Facility for Antiprotons and Ion Research) and took over the coordination of the technical design report (TDR) of this facility and of the LaSpec facility (laser spectroscopy). The TDR was approved by the FAIR steering committee in May 2010 and published in a review article. Subsequently, he was elected spokesperson of the MATS collaboration twice, for a total period from December 2010 to March 2015. Thereafter, he has been vice spokesperson until March 2024. In Spain, he has been Juan de la Cierva (October 2006 - September 2009), Ramón y Cajal (November 2009 - May 2012), Profesor Titular de Universidad (May 2012 - August 2021). He became Full Professor in August 2021.

He is considered a pioneer in the introduction of trapped-ion quantum optics techniques for precision experiments in nuclear physics. He is co-author of more

than 70 publications in peer-reviewed journals (including 5 PRLs, 1 Nature and 1 Science). His publications since 2013 mostly describe the progress of the work and results of the activities he leads at UGR, with the goal of positioning the laboratory as a national reference with the two platforms (Penning and Paul) existing simultaneously in only a few laboratories in the world. Regarding these activities, he has publications in the journals Scientific Reports, New Journal of Physics, Quantum Science and Technology, Physical Review A and Physical Review Research. He has four "*Sexenios de investigación*". Daniel Rodríguez has participated as a member of the research team in the activities promoted by the Spanish Network of Information and Quantum Technologies (RITCE) (2017-2019) and in the strategic network RITCE-2 (2020-2022). In this context, he organized in May 2022 the ICE7 (Quantum Information in Spain). He participates in the new proposal recently proposed for funding. He also participates in the teaching of three subjects of the Interuniversity Master in Quantum Technologies. At the European level, he has been responsible for the "Tools and Infrastructure" working group of the COST action "Trapped ions: Progress in classical and quantum applications" (2018-2023). He has been a member of the international scientific advisory committee of three international conferences (ion traps and laser spectroscopy) TCP2022, PLATAN2019 and PLATAN2024. Since July 2023, he is a member of the CERN SPSC committee to evaluate antiproton and antihydrogen Penning trap experiments carried out by six international collaborations: AEgIS, ALPHA, BASE, ASACUSA, GBAR and PUMA.

He has supervised 4 completed doctoral theses and is co-director of an ongoing thesis related to the construction of an optical clock based on strontium atoms, He has also supervised 16 master's theses in the period 2011-2024, and 12 bachelor's theses in the period 2014- 2023. In addition, he has directed graduate students from different programs (physics and engineering).