

New Faculty Member and Group Leader

Dr Carmen Rubio Verdu will join ICFO from Freie Universitat Berlin

January 25, 2023

ICFO's NEST program, supported by Fundacio Cellex and Fundacio Mir-Puig, allows the institute to offer outstanding opportunities for young scientists aiming to start and lead an independent research group. We are very pleased to announce a new member of the program, Dr Carmen Rubio Verdu, who will join ICFO as a new faculty member and Group Leader. Coming from the Freie Universitat Berlin, she will lead a program focused on the study of electronic correlated phases in two dimensional materials.

Carmen studied Chemistry at Universidad de Alicante (Spain) where she also received a Master in Materials Science. She went on to earn her PhD at nanoGUNE (San Sebastian, Spain) in the group of Jose Ignacio Pascual where she focused on fundamental studies of magnetism at the atomic scale, the effect of dimensionality in superconductors, and interactions between single spins and superconductors. In 2019, Carmen obtained a Mari Sk?odowska-Curie Individual Fellowship and was a postdoctoral fellow at Columbi

University (US) in the group of Abhay Pasupathy, later moving to Freie Universitat Berli (Germany) in the group of Katharina Franke, where she has been concentrating on the stud of electronic correlated phases in moire materials.

? In Spring 2023, Carmen will start as Principal Investigator at ICFO within the NEST Fello s Program. Her research plan will focus on the role of electronic correlations in the quant m electronic phases that emerge in two-dimensional systems. Recent progress in the field h s demonstrated that the combination of the constituents in the heterostructure is as releva t as the rotational angle between their atomic lattices for their performance. In her grou , Carmen aims to understand the role of many-body physics in quantum phenomena n two-dimensional and moire materials by means of low-temperature Scanning Tunneli g Microscopy and Spectroscopy.