Biography of Professor Maia G. Vergniory

Maia G. Vergniory is Full Professor of Physics at the Université de Sherbrooke, Canada, where she holds a Canada Excellence Research Chair in Quantum Materials. Her research focuses on the prediction, classification, and discovery of quantum materials, with particular emphasis on topology, magnetism, strong electronic correlations, and superconductivity.

Maia obtained her PhD in condensed matter physics from the University of the Basque Country (UPV/EHU) in 2008. She subsequently held postdoctoral positions at the Lawrence Berkeley National Laboratory in the United States and at the Max Planck Institute of Microstructure Physics in Germany. In 2022, she became a W2 Professor and Theory Group Leader at the Max Planck Institute for Chemical Physics of Solids in Dresden before moving to the Université de Sherbrooke in 2024.

She is best known for her contributions to the development of Topological Quantum Chemistry, a theoretical framework that transformed the search for topological materials and enabled the identification of thousands of topological compounds. Her work combines symmetry analysis, first-principles calculations, and many-body theory to uncover novel quantum phases in real materials.

Among her distinctions are the 2017 L'Oréal–UNESCO For Women in Science Award, elected as an APS Fellow in 2020, and the award of a Canada Excellence Research Chair in 2024. She is actively involved in international scientific leadership through major collaborations, funding panels, and the organization of conferences and schools in condensed matter physics.