

THE MATERIALS SCIENCE AND ENGINEERING DEPARTMENT S  
PRING 2026 COLLOQUIUM SERIES PRESENTS:

# Professor Pablo Jarillo-Herrero

Professor of Physics  
Massachusetts Institute of Technology



## *The Magic of Moiré Quantum Matter*

The understanding of strongly-interacting quantum matter has challenged physicists for decades. The discovery eight years ago of correlated phases and superconductivity in magic angle twisted bilayer graphene has led to the emergence of a new materials platform to investigate strongly interacting physics, namely moiré quantum matter. These systems exhibit a plethora of quantum phases, such as correlated insulators, superconductivity, magnetism, ferroelectricity, and more. In this talk I will review the basics of moiré quantum matter, highlighting also some of the recent advances in the field. I will end the talk with an outlook of some exciting directions in this emerging field.

**Pablo Jarillo-Herrero** is currently Cecil and Ida Green Professor of Physics at MIT. He received his “Licenciatura” in physics from the University of Valencia, Spain, in 1999, and his PhD in physics from Delft University of Technology in The Netherlands in 2005. After a postdoc at Columbia University, he joined MIT as an assistant professor of physics in January 2008 and received tenure in 2015. He was promoted to Full Professor of Physics in 2018. Prof. Jarillo-Herrero is the recipient of the APS 2020 Oliver E. Buckley Condensed Matter Physics Prize, the 2020 Wolf Prize in Physics, the 2020 Medal of the Spanish Royal Physics Society, the 2021 Lise Meitner Distinguished Lecture and Medal by the Royal Swedish Academy of Sciences, the 2021 Max Planck Humboldt Research Award, the 2021 US National Academy of Sciences Award for Scientific Discovery, the 2022 Dan Maydan Prize in Nanoscience Research, the 2023 Ramon y Cajal Medal from the Royal Spanish Academy of Sciences, the 2025 Onsager Medal by the Norwegian University of Science and Technology, and the 2025 BBVA Frontiers of Knowledge Award. He was elected to the US National Academy of Sciences in 2022, to the Spanish Royal Academy of Sciences in 2023, and to the European Academy of Sciences in 2025.

**Tuesday, April 14<sup>th</sup> • 4 pm CT • Tech L211**

Reception to follow in the Willens Wing Atrium

*In person only; no Zoom*

Questions? Contact [allison.macknick@northwestern.edu](mailto:allison.macknick@northwestern.edu)