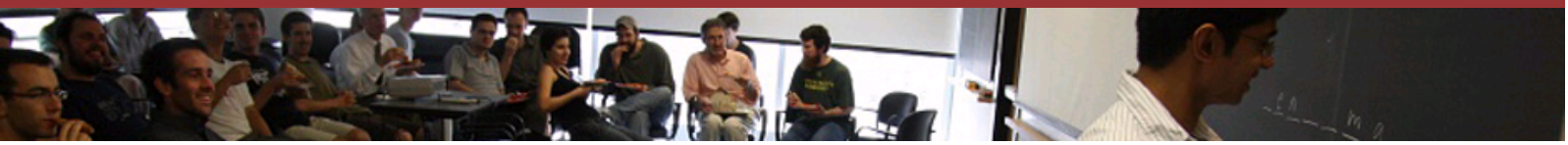

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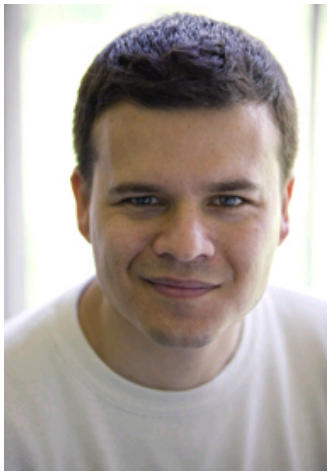

RELATED LINKS:

- Jarillo-Herrero Group Website

Area of Physics:

Condensed Matter Experiment

Research Interests

Professor Jarillo-Herrero's research interests lie in the area of experimental condensed matter physics, in particular quantum electronic transport and optoelectronics in novel low dimensional materials, such as graphene and topological insulators (TIs).

Biographical Sketch

Pablo Jarillo-Herrero joined MIT as an assistant professor of physics in January 2008. He received his M.Sc. in physics from the University of Valencia, Spain, in 1999. Then he spent two years at the University of California in San Diego, where he received a second M.Sc. degree before going to the Delft University of Technology in The Netherlands, where he earned his Ph.D. in 2005. After a one-year postdoc in Delft, he moved to Columbia University, where he worked as a NanoResearch Initiative Fellow. His awards include the Spanish Royal Society Young Investigator Award (2007), an NSF Career Award (2008), an Alfred P. Sloan Fellowship (2009), a David and Lucile Packard Fellowship (2009), the IUPAP Young Scientist Prize in Semiconductor Physics (2010), a DOE Early Career Award (2011), a Presidential Early Career Award for Scientists and Engineers (PECASE, 2012), and an ONR Young Investigator Award (2013).

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- L. C. Campos, A. F. Young, K. Surakitbovorn, K. Watanabe, T. Taniguchi, P. Jarillo-Herrero, "Quantum and classical confinement of resonant states in a trilayer graphene

Fabry-Perot interferometer", *Nature Communications*, **3**, 1239 (2012).

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- N. Gabor, J. Song, Q. Ma, N. Nair, T. Taychatanapat, K. Watanabe, T. Taniguchi, L.Levitov, P. Jarillo-Herrero, "Hot Carrier Assisted Intrinsic Photoresponse in Graphene", *Science*, **334**, 648-652 (2011).
- T. Taychatanapat, K. Watanabe, T. Taniguchi, P. Jarillo-Herrero, "Quantum Hall effect and Landau level crossing of Dirac fermions in trilayer graphene", *Nature Physics*, **7**, 621-625 (2011).
- T. Taychatanapat and P. Jarillo-Herrero, "Electronic Transport in Dual-Gated Bilayer Graphene at Large Displacement Fields", *Physical Review Letters*, **105**, 166601 (2010).
- H.B. Heersche, P. Jarillo-Herrero, J.B. Oostinga, L.M.K. Vandersypen and A.F. Morpurgo, "Bipolar supercurrent in graphene", *Nature,* **446**, 56 (2007).
- P. Jarillo-Herrero, J.A. van Dam and L.P. Kouwenhoven, "Quantum supercurrent transistors in carbon nanotubes", *Nature,* **439**, 953 (2006).
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- P. Jarillo-Herrero, J. Kong, H.S.J. van der Zant, C. Dekker, L.P. Kouwenhoven and S. De Franceschi, "Orbital Kondo effect in carbon nanotubes", *Nature,* **434**, 484 (2005).
- P. Jarillo-Herrero, S. Sapmaz, C. Dekker, L.P. Kouwenhoven and H.S.J. van der Zant, "Electron-hole symmetry in a semiconducting carbon nanotube quantum dot", *Nature,* **429**, 389 (2004).

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