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A Scanning Tunneling Study of Twisted Bilayer Graphene DIL-LON WONG, YANG WANG, Univ of California - Berkeley, JEIL JUNG, ASHLEY DASILVA, University of Texas at Austin, SERGIO PEZZINI, HSIN-ZON TSAI, HAN SAE JUNG, RAMIN KHAJEH, YOUNGKYOU KIM, SALMAN KAHN, SAJ-JAD TOLLABIMAZRAEHNO, HAIDER RASOOL, JUWON LEE, Univ of California - Berkeley, KENJI WATANABE, TAKASHI TANIGUCHI, National Institute for Materials Science, ALEX ZETTL, Univ of California - Berkeley, SHAFFIQUE ADAM, Yale-NUS College, ALLAN MACDONALD, University of Texas at Austin, MICHAEL CROMMIE, Univ of California - Berkeley — The properties of bilayer graphene strongly depend on the angle of rotation between its two layers. We investigated the local electronic structure of twisted bilayer graphene on an insulating substrate. Using scanning tunneling microscopy, we measured the energy dependence of features in the differential tunneling conductance for many different twist angles. Comparison with theoretical calculations reveal the physical origin of these features.

> Dillon Wong Univ of California - Berkeley

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