

Abstract Submitted  
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**Scanning Tunneling Microscopy of Graphene on a Boron Nitride Substrate** YANG WANG, Dept. of Physics at U.C. Berkeley, REGIS DECKER, VICTOR BRAR, Dept. of Physics at U.C. Berkeley / Lawrence Berkeley National Lab, WILLIAM REGAN, HSIN-ZON TSAI, QIONG WU, Dept. of Physics at U.C. Berkeley, ALEX ZETTL, MICHAEL CROMMIE, Dept. of Physics at U.C. Berkeley / Lawrence Berkeley National Lab — Graphene placed on a boron nitride (BN) substrate has been shown to result in increased mobility and improved Quantum Hall measurements.<sup>1</sup> It is therefore of great interest to understand how BN substrates differently influence graphene compared to more standard SiO<sub>2</sub> substrates. I will present new scanning tunneling microscopy measurements of graphene placed on a BN substrate. Differences in the local behavior of graphene on a BN substrate versus a SiO<sub>2</sub> substrate will be discussed.

<sup>1</sup>Dean, CR *et al.* Boron nitride substrates for high-quality graphene electronics. *Nature Nanotechnology* **5**, 722-726 (2010)

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