Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Beyond graphene: atomic scale structure of quasi-2D van der Waals materials CHRISTOPHER GUTIERREZ, LIUYAN ZHAO, KIN FAI MAK, PAUL CADDEN-ZIMANSKY, DMITRI EFETOV, TONY F. HEINZ, GEORGE W. FLYNN, PHILIP KIM, ABHAY PASUPATHY, Columbia University, ROBERT J. CAVA, Princeton University — Graphene, a single atomic layer of graphite, has attracted much attention for its unique electronic and mechanical properties. But what role does reduced dimensionality play in other 2D atomic crystals? In this talk we present scanning tunneling microscopy (STM) measurements of the atomic scale structure and spectroscopy of related quasi-2D materials including the transition metal dichalcogenides (TMDs), and their heterostructures with graphene.

Christopher Gutierrez
Columbia University

Date submitted: 10 Nov 2011 Electronic form version 1.4