Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Graphene K and K' States at the Dirac Point LAWRENCE SNY-
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Department — The graphene band structure states at the K and K' points and the
Fermi level, the Dirac point, computed when a (1x1) unit cell is employed, fall at the
gamma point when a (3x3) unit cell is employed. These states at the gamma point
of the Brillouin zone for the (3x3) unit cell have a zero phase factor and are conve-
niently represented as molecular orbitals of pi electrons. These states are illustrated
and discussed.

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Date submitted: 19 Nov 2010   Electronic form version 1.4