## Report

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Van der Waals solids were already very widely know. However the revolution in graphene was the ability to extract a single layer of graphene. The

- Bloch theorem.
- Rich for electronics due to flatland first order dependence on cristal lattice.
- Need to describe wavefunction with a spinnor.
- Interlace graphene with hexagonal boron nitride - $\xi$  good 2d van der waals hetero strucutre with confinement of the order of 0.3nm
  - magic of graphene is that the electrons are strongly decoupled form the lattice.