

1086-82-2992

Ngoc T. Do (dothanh@math.tamu.edu), Mathematics Department, Texas A&M University, College Station, Texas 77843-3368, and **Peter Kuchment*** (kuchment@math.tamu.edu), Mathematics Department, Texas A&M University, College Station, Texas 77843-3368. *Quantum graph models of graphyne structures*. Preliminary report.

Graphyne is the common name for several suggested mono-layer carbon allotropes, which carry a promise of surpassing graphene in terms of their interesting properties. We will present a study of spectra of invariant Schrödinger operators on some graphyne structures. (Received September 30, 2012)