

Abstract Submitted  
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**Superconducting properties of quasi-one dimensional graphene**

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We study quasi-one dimensional graphene (polyacene) two leg ladders modeled by repulsive  $U$  Hubbard model using DMRG. The strong repulsive interactions along with the high density of states at the Fermi energy enhance the conducting properties of the ladder (which is a conductor) and give rise to enhancement of the pairing energy scales, having to do with the superconducting properties of the ladder. The presence of phonons in this system has been known to give rise to Peierls and superconducting instabilities as well.

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