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Topological defects in graphene sheets.

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Topological defects play a crucial role in the electronic properties of graphene. Recently, it has been shown that various sorts of defects (like substitutional defects) enhance the density of states changing the physics expected for such system. In this work we propose a formalism based on a continuous model to explore the influence on the electronic properties of morphological defects as pentagon and pentagon-heptagon pairs that can be generalized to include any amount of disorder.

Keywords : topological defects, density of states