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## **Local defects and ferromagnetism in graphite**

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A number of recent experiments suggest that pure graphite behaves as a highly correlated electron system showing unexpected electrical and magnetic properties opening doors for organic magnets and carbon-based nanoelectronics. These properties are addressed within a microscopic model based on 2D Dirac fermions that allows to address the role of disorder and interactions. The model can also describe nanographite, nanotubes and fullerenes.

*Keywords* : 2D Dirac fermions, edge states, graphene