

## Graphene Nanoribbons with a Magnetic Edge

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Analytical and numerical results based on the tight binding model are presented for zigzag graphene nanoribbons with  $z1$  and  $z1z_1z_2$  edges. We show the crucial importance of the symmetry of the two edges in determining the electronic structures of the system. Examples of significant band gap narrowings due to symmetry breaking are illustrated.

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