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Signatures of indentation strain in graphene conductance MATTHEW BARR, MARIO BORUNDA, ERIC HELLER, Harvard University — We investigate effects on the conductance of a graphene sheet of electron scattering from a localized indentation. Strain in graphene creates effective magnetic fields, and the scattering from a radial strain profile is distinct from other short range scatterers. Through tight-binding calculations, we examine the expected conductance in several experimental geometries, including within graphene nano-ribbons and suspended graphene.

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