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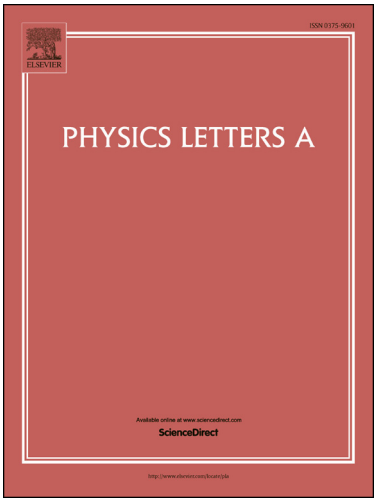

Conductance of Rashba electron in a quantum waveguide with smooth boundary

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Highlights

- Spin transport and conductance in 2D straight waveguides with smooth stubs have been studied by using transfer matrix method.
- Conductance quantization is common in these 2D waveguides when the Fermi energy and the width of the waveguide change.
- A quadrate stub, which has a mutational boundary, can be studied as a limit of the stub with a smooth boundary.