

Resonant-state analysis of electronic conduction with Fano peaks

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Quantum electronic conduction is connected to quantum scattering problem by the Landauer formula. Resonant states that appear in quantum scattering as the problem of open quantum systems thereby affect quantum electronic conduction. In the present talk, I will describe first how quantum resonant states appear in quantum scattering and then show they affect quantum electronic conduction. In particular, I will describe formation of Fano resonance peaks in terms of interference between resonant states.

References

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