Objective

- Quantum transport in Resonant Tunneling Diodes.

Approach

- Non-equilibrium Green's function formalism (NEGF) for charge and current.
- Generalized open boundary conditions for the Schrödinger equation.
  - Quasi bound states
  - Relaxation in the reservoirs

Impact

- Tool on the nanoHUB: RTD-NEGF.
- 900 simulation runs from Aug.-Nov 08.

Conduction Band Profile

Transmission Coefficient

Current Vs Voltage

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