

Objective:

Implement general mesh that uses density information to improve Poisson convergence and simulation efficiency

Problem:

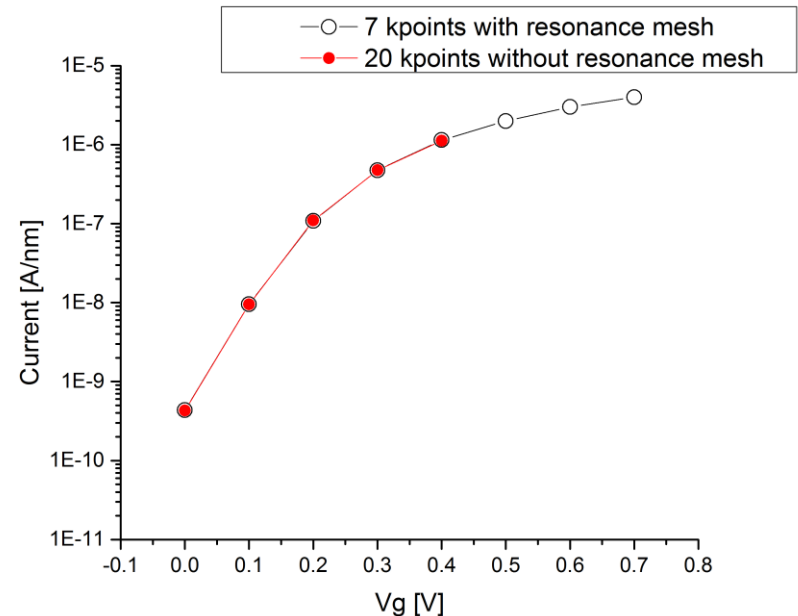
For scattering simulations, contact band structure information to create an accurate energy/k-mesh.

Approach:

- Initial mesh from adaptive grid that uses
- Find resonances in density of density of states and increase mesh density around those resonances

Results/Impact:

- Improve convergence for scattering simulations
- Lower number of k-points needed for UTB simulations by factor of 3



2x2x20 nm Si wire in effective mass