

## Motivation

Atoms in realistic nanodevices relax to positions different from crystal geometry

This results in strained devices and significant alteration of bandstructures

## NEMO5 – solution:

Electronic Hamiltonian as a function of external and internal strain

- ✓ External strain definable in input deck (via full epsilon matrix)
- ✓ Strain due Boykin et al. (PRB 66, 125207 (2002)) implemented and tested
- ✓ Strain due Boykin et al. (PRB 81, 125202 (2010)) implemented and tested

Exact agreement with published data

## GaAs band edges under strain

