

NCN at Berkeley Tools



NCN@Berkeley Tool Support

We have identified a list of tools for which we commit the following level of service:

- monitor support tickets, questions, and wishlists and provide a response within one business day.
- fix simple bugs within a week.
- move long term projects and tool improvement requests to a public wish list.

The overall support structure and philosophy of the NCN and nanoHUB is [described in a different page](#).

NCN@Berkeley Supported Educational Tools

- [Berkeley Computational Nanoscience Class Tools](#) Tools for UC Berkeley Computational Nanoscience course
- [NanoHeatFlow](#) Tool for exploring the mechanical energy transfer between carbon nanotubes
- [Quantum Monte Carlo](#) Tool for learning the basics of quantum Monte Carlo calculations, with a number of small molecule examples

NCN@Berkeley Supported Research Tools

- [StrainBands](#) – Explore the influence of strain on first-principles bandstructures of semiconductors.
- [Carbon Nanotube Heterojunction Modeler](#) – Generate atomic coordinates of joined carbon nanotubes of arbitrary chirality, and compute their electronic and transport properties with a standard nearest-neighbor tight-binding Green's function-based approach.
- [Nano-Plasmonic Bowtie Antenna Simulator](#) – Examine electromagnetic enhancement profiles for nanoscale bowtie antennae using a finite-difference time-domain (FDTD) package, MEEP.
- [Siesta](#) – Flexible tool for computing the electronic structure of solids, molecules, and surfaces.

Links to: Tools, Questions and Answers, and Wishlists

User due post questions or send support tickets where they essentially ask for new features in tools or suggest improvements. With the limited resources we have available we want to manage these tool suggestions publicly. Eventually we believe that each tool will have its own "Wishlist". For now we summarize the tool improvment wishes here.

Tool	Questions	Wishlist
Berkeley Computational Nanoscience Class Tools	Questions	Wishes
NanoHeatFlow	Questions	Wishes
Quantum Monte Calro	Questions	Wishes
StrainBands	Questions	Wishes
Carbon Nanotube	Questions	Wishes
Heterojunction Modeler		
Nano-Plasmonic Bowtie	Questions	Wishlist
Antenna Simulator		
Siesta	Questions	Wishlist