Subject: quantum visualizations using IDL
Posted by Rob.Dimeo on Sat, 08 Nov 2008 14:01:41 GMT
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I recently finished documenting some IDL procedures and functions that calculate solutions to the Schrodinger equation of quantum mechanics for a number of different situations (e.g. for different potentials, in one and two dimensions, time-independent, time-dependent). For those of you in attendance at the IDL Users' Group meeting in Boulder a few weeks ago, I demonstrated a number of these programs during my presentation. Since a few of you at the meeting expressed interest in the code and documentation, you can find it at the following URL:

http://www.ncnr.nist.gov/staff/dimeo/qvis/sqvis_index.html

The code can be downloaded as a zip file and the documentation is a PDF document.

Note that the documentation is geared to individuals with some knowledge of QM but (I hope that) the code is easy enough to run to see the animations. The code was written to create visual demonstrations of quantum phenomena to non-experts visiting our facility but the documentation is *not* geared to non-experts.

Comments are, of course, welcome.