NLSEmagic

Installation Guide

Pre-compiled Binaries Installation

1. On Windows, make sure that the Visual Studios real-time libraries are installed on the system. The best way to do this is to install the free Visual C++ Express.

2. Unzip all files into the directory of your choice.

3. For running the CUDA integrators, be sure to have the most recent drivers installed for your GPU.
   Also, place the `nvmex.pl` file into your MATLAB bin directory (this is not needed to run the code but its presence in that directory is how the NLSEmagic driver scripts currently detects if CUDA is available or not).

4. Run MATLAB and navigate to the directory where you unzipped the files.

5. Run **NLSEmagicxD.m** (x=1,2 or 3)

Source Code Installation

1. Follow instructions 1- 4 above.

2. On Windows, run "mex –setup" and choose the Visual C++ as the compiler.

3. On Linux, modify the "makefile" to point to proper paths.

4. Run the script **makeNLSEmagicxD.m** (x=1,2, or 3)

5. In order for the GPU codes to compile, you must follow all of the instructions given in the "Setup Guide for Compiling CUDA MEX Codes" included in the NLSEmagic paekage.

6. Run **NLSEmagicxD.m** (x=1,2 or 3)