REAPERS: A REAsonably PERformant Spin Model Simulation Library

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Abstract

A submitted program is expected to satisfy the following criteria: it must be of benefit to other physicists, or be an exemplar of good programming practice, or illustrate new or novel programming techniques which are of importance to computational physics community; it should be implemented in a language and executable on hardware that is widely available and well documented; it should meet accepted standards for scientific programming; it should be adequately documented and, where appropriate, supplied with a separate User Manual, which together with the manuscript should make clear the structure, functionality, installation, and operation of the program.

Your manuscript and figure sources should be submitted through Editorial Manager (EM) by using the online submission tool at https://www.editorialmanager.com/comphy/.

In addition to the manuscript you must supply: the program source code; a README file giving the names and a brief description of the files/directory structure that make up the package and clear instructions on the installation and execution of the program; sample input and output data for at least one comprehensive test run; and, where appropriate, a user manual.

A compressed archive program file or files, containing these items, should be uploaded at the "Attach Files" stage of the EM submission.

For files larger than 1Gb, if difficulties are encountered during upload the author should contact the Technical Editor at cpc.mendeley@gmail.com.

Keywords: keyword1; keyword2; keyword3; etc.

Email address: `cl91tp@gmail.com` (Chang Liu)
URL: `github.com/cl91` (Chang Liu)

PROGRAM SUMMARY/NEW VERSION PROGRAM SUMMARY

Program Title:

CPC Library link to program files: (to be added by Technical Editor)

Developer's repository link: (if available)

Code Ocean capsule: (to be added by Technical Editor)

Licensing provisions(please choose one): CC0 1.0/CC By 4.0/MIT/Apache-2.0/BSD 3-clause/BSD 2-clause/GPLv3/GPLv2/LGPL/CC BY NC 3.0/MPL-2.0

Programming language:

Supplementary material:

*Journal reference of previous version:**

*Does the new version supersede the previous version?:**

*Reasons for the new version:**

*Summary of revisions:**

Nature of problem(approx. 50-250 words):

Solution method(approx. 50-250 words):

Additional comments including restrictions and unusual features (approx. 50-250 words):

References

[1] Reference 1

[2] Reference 2

[3] Reference 3
* Items marked with an asterisk are only required for new versions of programs previously published in the CPC Program Library.

1.