

LaTeX Physics Package in MathJax

Mimicking Some of the Commands in LaTeX Physics Package

Kolen Cheung
University of California, Berkeley
khcheung@berkeley.edu

April 12, 2016

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1 LaTeX Physics Package

This extension is to mimics [the LaTeX Physics Package¹](#) in MathJax. For details, see [the GitHub pages²](#) and [the GitHub repository³](#) of this extension.

2 Some Commands are not Working

The following commands in the Physics Package is not implemented yet:

- All Matrix Macros
- So far everything done here is by string substitution. Whenever commands involving the following cannot be done simply by string substitution and hence not working:

1. * modified command

¹<http://www.ctan.org/pkg/physics>

²<https://ickc.github.io/MathJax-third-party-extensions/physics/>

³<https://github.com/ickc/MathJax-third-party-extensions>

- 2. [] (or ()) is involved
- 3. variable no. of arguments
- Examples of commands that doesn't work: `\dv:` has all the properties mentioned above

As I mentioned, everything done so far is by string substitution only. Some hints are given in [Pull Request#16—MathJax-third-party-extensions](#)⁴ but my skill is too limited to understand how the above cases should be handled. Feel free to improve it though.

3 Organization

`physics.xlsx` is the master file.

- Columns A-L are copied to [test/tables.md](#)
- Columns M-V are copied to [unpacked/physics.js](#)
- Columns M-V excluding column O are copied to [test/macro.js](#)

`License.js` is used to store the license that should be appended to the `.js` files.

Other files are built automatically by `physics.sh`. [MultiMarkdown](#)⁵, UglifyJS2, LaTeX are assumed. I used it on Mac and have no idea if the way my bash script is written is OS agnostic or not.

4 Tests

A few tests are given:

- [Using MathJax's CDN](#)^{6 7}
- [Using this repository](#)⁸
- [Using this repository \(unpacked version\)](#)⁹
- [As a Macro](#)^{10 11}
- [As a PDF generated by LaTeX](#)¹²: this is the reference file using the LaTeX's the Physics Package. You can compare the LaTeX output and HTML output and you will see which one is working now or yet to be implemented.

⁴<https://github.com/mathjax/MathJax-third-party-extensions/pull/16>

⁵<http://fletcherpenney.net/multimarkdown/download/>

⁶<https://ickc.github.io/MathJax-third-party-extensions/physics/test/test-physics-js-mathjax-cdn.html>

⁷i.e. only the one pushed to MathJax's official third parties extensions repository is tested

⁸<https://ickc.github.io/MathJax-third-party-extensions/physics/test/test-physics-js.html>

⁹<https://ickc.github.io/MathJax-third-party-extensions/physics/test/test-physics-js-unpacked.html>

¹⁰<https://ickc.github.io/MathJax-third-party-extensions/physics/test/macro.html>

¹¹Rather than as an extension loaded separately, this one is a macro put in the file directly

¹²<https://ickc.github.io/MathJax-third-party-extensions/physics/index.pdf>