Plugin Equation

Use this wiki plugin, introduced in Tiki2, to render an equation written in LaTeX syntax as an image. See also MathJax.

Prerequisites

**PHP**

This plugin must have the php function EXEC enabled on the server for it to work.

**LaTeX**

LaTeX distribution must be installed on your server. Check you have installed the following LaTeX packages:

- `inputenc`
- `amsmath`
- `amsfonts`
- `amssymb`

- You should have a:
  - `/usr/bin/latex, /usr/bin/dvips, /usr/bin/convert, /usr/bin/identify` and `/usr/bin/convert`  
  - If the path of these tasks are incorrect, you must adjust the php code in `lib/equation/class.latexrender.php`
- the directories `lib/equation/tmp/` and `lib/equation/pictures` must be writeable by the server.

The following directories need write permissions for the plugin to work:

- `lib/equation/tmp`
- `lib/equation/pictures`

Parameters

*Introduced in Tiki 2.*

*Preferences required: wikiplugin_equation*

<table>
<thead>
<tr>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(body of plugin)</em> - equation</td>
</tr>
</tbody>
</table>

*no parameters*

Examples

**Basic syntax**
With a famous equation

*This code,*

$$e=mc^2$$

*Would produce on this site:*

$e=mc^2$

Another equation

*This code,*

```latex
<math>\setlength{\unitlength}{1cm}
\begin{picture}(4,2)
\put(1,1){\circle{3}}
\put(3,1){\circle*{5}}
\end{picture}
</math>
```

*Would produce on this site:*

\setlength{\unitlength}{1cm} \begin{picture}(4,2) \put(1,1){\circle{3}} \put(3,1){\circle*{5}} \end{picture}

**Customizations**

This plugin actually wraps a minimalistic LaTeX around the formula. For instance, you can customize `lib/equation/class.latexrender.php` if you want other fonts.

```latex
\documentclass[12pt]{article}
\usepackage[latin1]{inputenc}
\usepackage{amsmath}
\usepackage{amsfonts}
\usepackage{amssymb}
\pagestyle{empty}
\begin{document}
$your sexy formula$
\end{document}
```