

# Marsden Slide Package Documentation

*Wendy G. McKay*

wgm@cds.caltech.edu

*Ross R. Moore*

ross@ics.mq.edu.au



# Style Files

## ■ *Document class and packages used:*

### marslide-template.tex

```
%-----1
\documentclass[12pt]{article}
\usepackage[marsdefs, texpower, cm]{marslide}
\begin{document}
    ...
\end{document}
```

### marslide.sty

```
%-----2
% These packages are called inside marslide.sty
%
\usepackage{amssymb, amsmath}
\usepackage{graphicx}
\usepackage{color}
\usepackage{verbatim}
\usepackage{multicol, tabularx}
\usepackage[ ... ]{hugefonts}
\usepackage{hyperref}
\usepackage{texpower}
%
%
```

### marsdefs.sty

```
%-----3
% This package defines the options
% [marsdefs, cm] to marslide.sty
% It sets the layout of the page, and style, &
% color of the fonts.
%
\usepackage[landscape, letterpaper, verbose,
%, textheight=5.5 truein % calculated
%, textwidth=10.0 truein % calculated
%, voffset=0pt
%, hoffset=0pt
%, tmargin=0pt
%, bmargin=0pt
%, lmargin=36pt
%, rmargin=36pt
%, headheight=78pt
%, headsep=20pt
%, footskip=0.20truein
%, tmargin=.10truein
]{geometry}
\addtolength{\voffset}{-.10truein}
```

# Itemized Headline Levels

## ■ *First headline itemize*

*use* `\begin{firstheadlineitemize}\item ...`

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$$\alpha = \beta + \gamma$$

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*use* `\begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item* ... *use* `\item ...`

# Itemized Headline Levels

## ■ *First headline itemize*

*use* `\begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item* ... *use* `\item ...`

□ Second headline itemize

# Itemized Headline Levels

## ■ *First headline itemize*

`use \begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item* ... `use \item ...`

Second headline itemize

and yet another ...

`use \begin{secondheadlineitemize}\item ...`

# Itemized Headline Levels

## ■ *First headline itemize*

`use \begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item* ... `use \item ...`

Second headline itemize

and yet another ...

`use \begin{secondheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

# Itemized Headline Levels

## ■ *First headline itemize*

use `\begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item* ... use `\item ...`

Second headline itemize

and yet another ...

use `\begin{secondheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ● *Third headline itemize*

use `\begin{thirdheadlineitemize}\item ...`

# Itemized Headline Levels

## ■ *First headline itemize*

use `\begin{firstheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ■ *And another item ...* use `\item ...`

Second headline itemize

and yet another ...

use `\begin{secondheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

## ● *Third headline itemize*

use `\begin{thirdheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

# Itemized Headline Levels

- Fourth headline itemize

use `\begin{fourthheadlineitemize}\item ...`

# Itemized Headline Levels

- Fourth headline itemize

use `\begin{fourthheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

**NOTE:** The math displays above are centered relative to each itemized level and not the page width (the norm in the usual L<sup>A</sup>T<sub>E</sub>X itemize environment using the math display commands `\[ ... \]` or between `$$` symbols.) To do this use:

```
\begin{itemmath}  
...  
\end{itemmath}
```

within the `{...headlineitemize}` environments.

The following array of equations uses the width of the entire page.

# Itemized Headline Levels

- Fourth headline itemize

use `\begin{fourthheadlineitemize}\item ...`

$$\alpha = \beta + \gamma$$

**NOTE:** The math displays above are centered relative to each itemized level and not the page width (the norm in the usual L<sup>A</sup>T<sub>E</sub>X itemize environment using the math display commands `\[ ... \]` or between `$$` symbols.) To do this use:

```
\begin{itemmath}  
...  
\end{itemmath}
```

within the `{...headlineitemize}` environments.

The following array of equations uses the width of the entire page.

$$\frac{d}{dt} \frac{\partial L}{\partial \dot{q}^i} - \frac{\partial L}{\partial q^i} = 0 \tag{1}$$

$$L(q, \dot{q}) = \frac{1}{2} \dot{q}^T M \dot{q} - V(q) \tag{2}$$

$$M \ddot{q} = -\nabla V(q) \tag{3}$$

# Itemized Headline Code

The L<sup>A</sup>T<sub>E</sub>X code used to create the preceding headline items is:

# Itemized Headline Code










The L<sup>A</sup>T<sub>E</sub>X code used to create the preceding headline items is:

```
%-----1
\begin{firstheadlineitemize}
\item First headline itemize \\\
    {\small \null\quad use
    \verb+\begin{firstheadlineitemize}\item+ \dots}
\pause
    \begin{itemmath}
    \alpha = \beta + \gamma
    \end{itemmath}
\pause
\item And another item\dots
    {\small use \verb+\item+ \dots}
\pause

%-----2
\begin{secondheadlineitemize}
\item Second headline itemize
\pause
\item and yet another \dots\\
    {\small \null\quad use
    \verb+\begin{secondheadlineitemize}\item+ \dots}
\pause
    \begin{itemmath}
    \alpha = \beta + \gamma
    \end{itemmath}
\pause
```

```
%-----3
\begin{thirdheadlineitemize}
\item Third headline itemize \\\
    {\small \null\quad use
    \verb+\begin{thirdheadlineitemize}\item+ \dots}
\pause
    \begin{itemmath}
    \alpha = \beta + \gamma
    \end{itemmath}
\medskip
%-----4
\begin{fourthheadlineitemize}
\item Fourth headline itemize\\
    {\small \null\quad use
    \verb+\begin{fourthheadlineitemize}\item+ \dots}
\pause
    \begin{itemmath}
    \alpha = \beta + \gamma
    \end{itemmath}
\end{fourthheadlineitemize}
%-----4
\end{thirdheadlineitemize}
%-----3
\end{secondheadlineitemize}
%-----2
\end{firstheadlineitemize}
%-----1
```

# Colors defined

Color Sample	RGB	rgb=RGB/255	Name
	0 0 0	0.0000 0.0000 0.0000	black
	89.25 102 158.1	0.3500 0.4000 0.6200	greyblue
	255 69 0	1.0000 0.706 0.0000	orangered
	204 127.5 51	0.8000 0.5000 0.2000	darkorange
	237.15 160.65 89.25	0.9300 0.6300 0.3500	lightorange
	204 153 0	0.8000 0.6000 0.0000	webyellow
	51 102 0	0.2000 0.4000 0.0000	darkgreen
	127.5 178.5 127.5	0.5000 0.7000 0.2000	darkpeagreen
	204 204 153	0.8000 0.8000 0.6000	webpeagreen

# Predefined Color Commands

These are the commands that are predefined in the `marsdefs.sty`. They are implicitly defined in the commands on the next page.

<code>\bannercolor</code>		<code>\captioncolor</code>	black
<code>\titlecolor</code>	darkorange	<code>\arrowcolor</code>	webyellow
<code>\authorcolor</code>	greyblue	<code>\labelcolor</code>	webyellow
<code>\bannertextcolor</code>	webpeagreen	<code>\linecolor</code>	greyblue
<code>\namecolor</code>	darkgreen	<code>\commentcolor</code>	darkorange
<code>\defncolor</code>	webyellow	<code>\sncolor</code>	greyblue
<code>\footertextcolor</code>	webpeagreen	<code>\ssncolor</code>	greyblue
<code>\footerbkgrndcolor</code>	white	<code>\paracolor</code>	greyblue
<code>\urlcolor</code>	lightorange	<code>\itemcolor</code>	darkorange

All the above colors may be redefined in your document. For example, to use the color `darkolivegreen` for the `titlecolor`, add the commands:

```
%\definecolor{darkolivegreen}{rgb}{0.33,0.41,0.18} %or  
\definecolor{darkolivegreen}{RGB}{85, 107, 47}  
\renewcommand{\titlecolor}{darkolivegreen}
```

# Text Color Commands

Text color commands with one parameter may be used to change color of text for definitions, names, etc. with preassigned colors. For example, `\TextCname{...}` is equivalent to `\textcolor{\namecolor}{...}`.

<code>\TextCname{...}</code>	<i>Text in color of 'namecolor' - use for Names</i>
<code>\TextCbf{...}</code>	<b>Text in 'defncolor'</b>
<code>\TextCbfi{...}</code>	<b><i>Text in 'defncolor'</i></b>
<code>\TextCit{...}</code>	<i>Text in 'defncolor'</i>
<code>\TextCline{...}</code>	<b>Text in color of lines in figures</b>
<code>\TextCarrow{...}</code>	<b>Text in color of arrows in figures</b>
<code>\TextClabel{...}</code>	<b>Text in color of labels in figures</b>
<code>\TextCcomment{...}</code>	<b>Text in color of comments in figures</b>
<code>\TextCurl{...}</code>	<b>Text in color of the url hyperlink</b>
<code>\TextCcaption{...}</code>	<b>Text in color of the caption</b>

# Font Sizes & Style

## ■ *Computer Modern Font Sizes*

`\HUGE 65pt,`

`\Huge 55pt, \huge 40pt,`

`\LARGE 36pt, \Large 32pt, \large 28pt,`

`\normalsize 25pt, \small 20pt, \scriptsize 17pt,`

`\footnotesize 17pt, \tiny 12pt,`

# Font Sizes & Style

## ■ *ComputerModern Font Sizes*

`\HUGE 65pt,`

`\Huge 55pt, \huge 40pt,`

`\LARGE 36pt, \Large 32pt, \large 28pt,`

`\normalsize 25pt, \small 20pt, \scriptsize 17pt,`

`\footnotesize 17pt, \tiny 12pt,`

## ■ *ComputerModern Font Styles*

`\sf` for SansSerif

`\sl` for *Slanted*

`\rm` for Serif (default)

# Ligature Check

## ■ *Ligatures fi, ffi, fl, ffl*

□ FONT: ComputerModern

□ SAMPLE:

`\rm:` figures definition first difficult affluence flow

`\sl:` *figures definition first difficult affluence flow*

`\it:` *figures definition first difficult affluence flow*

`\tt:` figures definition first difficult affluence flow

# Accents

## ■ *AccentTest in \bf*

*Peter Schröder, Émile Zola, résumé*

á é í ó ú ý

Á É Í Ó Ú Ý

ä ë ï ö ü ÿ

Ä Æ Ĩ Ö Ü Ÿ

à è ì ò ù ÿ

À È Ì Ò Ù ÿ

â ê î ô û ŷ

Â Ê Î Ô Û Ŷ

ã ã ã ã ã ã

Ã Ë Ĭ Ñ Ñ Ñ

ā ē ī ō ū ŷ

Ā Ē Ī Ō Ū Ŷ

à è ì ò ù ÿ

À È Ì Ò Ù ÿ

ǎ ě ĭ ǒ ŭ ǳ

Ǻ Ǽ Ĩ Ǫ Ů ǹ

ǎ ě ĭ ǒ ŭ ǳ

Ǻ Ǽ Ĩ Ǫ Ů ǹ

ǎ ě ĭ ǒ ŭ ǳ

Ǻ Ǽ Ĩ Ǫ Ů ǹ

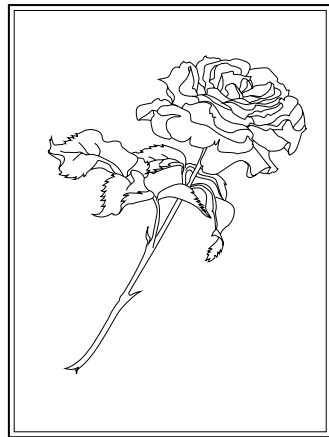
ââ êê îî ôô ûû ŷŷ

# Text & Graphics

*Where is the wisdom we have lost in knowledge?*

*Where is the knowledge we have lost in information?*

—T. S. ELIOT (1888-1965)



**Small Rose**

## Code for inserting graphics

```
\begin{minipage}{0.5\textwidth}  
\begin{center}  
\includegraphics{SmallRose}\  
\TextCcaption{\small Small Rose}  
\end{center}  
\end{minipage}
```

# Figure Captions

```
include graphic.eps here
```

```
\includegraphics[scale=0.0,angle=0]{graphic}
```

Caption text here. (Hint: do not float figures)

# Drafts & Itemize Example

- **Draft Mode:** The version date, typeset date, time, and page number appears in the footer if the `\Draft` command is included. To set the version date include the command `\SetVersionDate{...}`. Default is `\today`.
- **Itemize:** This page is prepared with the normal `itemize` environment with the item ‘dingbats’ explicitly set by `\itemSquareLarge`. The fontsize default is the `normalsize` (25pt) but the text size can be changed with the use of the usual fontsize commands `\huge`, `\LARGE`, etc.
- **Code:**

```
\begin{itemize}
  \itemSquareLarge {\Large Draft Mode:}\enspace ...
  \itemSquareLarge {\Large Itemize:}\enspace ...
  \itemSquareLarge {\Large \sl Code}\ \ ...
\end{itemize}
```

# Banner Strips

Just for fun: Other ways of putting strips in the text

`\bannerStrip{}` gives strip of size `\pagewidth`

bannerStrip

`\bannertitle{}` gives strip of size `\textwidth`

bannertitle

# Other Commands

Sections, subsections, and paragraphs headings are left justified<sup>1</sup>

■ *SlideSection* (pre-set to *\huge*)

Usage: `\SlideSection{...}~\\`

---

<sup>1</sup>The commands on this page use preset colors for dingbats and section, subsection, and paragraph headings. Put `~\\` after the (sub)section heading to get text on a new line.

# Other Commands

Sections, subsections, and paragraphs headings are left justified<sup>1</sup>

■ *SlideSection* (pre-set to `\huge`)

Usage: `\SlideSection{...}~\`

■ *SlideSubSection* (pre-set to `\LARGE`)

Usage: `\SlideSubSection{...}~\`

---

<sup>1</sup>The commands on this page use preset colors for dingbats and section, subsection, and paragraph headings. Put `~\` after the (sub)section heading to get text on a new line.

# Other Commands

Sections, subsections, and paragraphs headings are left justified<sup>1</sup>

■ *SlideSection* (pre-set to `\huge`)

Usage: `\SlideSection{...}~\`

■ *SlideSubSection* (pre-set to `\LARGE`)

Usage: `\SlideSubSection{...}~\`

■ *SlideSubSubSection* (pre-set to `\Large`)

Usage: `\SlideSubSubSection{...}~\`

---

<sup>1</sup>The commands on this page use preset colors for dingbats and section, subsection, and paragraph headings. Put `~\` after the (sub)section heading to get text on a new line.

# Other Commands

Sections, subsections, and paragraphs headings are left justified<sup>1</sup>

■ *SlideSection* (pre-set to `\huge`)

Usage: `\SlideSection{...}~\`

■ *SlideSubSection* (pre-set to `\LARGE`)

Usage: `\SlideSubSection{...}~\`

■ *SlideSubSubSection* (pre-set to `\Large`)

Usage: `\SlideSubSubSection{...}~\`

■ *SlideParagraph* (pre-set to `\large`)

Usage: `\SlideParagraph{...}`

---

<sup>1</sup>The commands on this page use preset colors for dingbats and section, subsection, and paragraph headings. Put `~\` after the (sub)section heading to get text on a new line.

# Lists with Other Dingbats





- Itemized list with `\itemSquareLarge`.
- Itemized list with `\itemSqLarge`.
  - Itemized list with `\itemBulletLarge`.
  - Itemized list with `\itemCircLarge`.

## ■ *Code*





```
\begin{itemize}
\itemSquareLarge Itemized list with \verb+\itemSquareLarge+.
  \begin{itemize}
\itemSqLarge Itemized list with \verb+\itemSqLarge+.
  \begin{itemize}
\itemCircLarge Itemized list with \verb+\itemCircLarge+.
  \begin{itemize}
\itemBulletLarge Itemized list with \verb+\itemBulletLarge+.
  \end{itemize}
\end{itemize}
\end{itemize}
\end{itemize}
\end{itemize}
```

# References with Hyperlinks





## bullet

`\itemBullethuge`   
`\itemBulletLARGE`   
`\itemBulletLarge`   
`\itemBulletlarge` 





## square

`\itemSquarehuge`   
`\itemSquareLARGE`   
`\itemSquareLarge`   
`\itemSquarelarge` 

## circ

`\itemCirchuge`   
`\itemCircLARGE`   
`\itemCircLarge`   
`\itemCirclarge` 

## open square

`\itemSqhuge`   
`\itemSqLARGE`   
`\itemSqLarge`   
`\itemSqlarge` 

# References with Hyperlinks

- **Koon, W. S., M. Lo, J. E. Marsden and S. Ross**, Heteroclinic Connections between periodic orbits and resonance transitions in celestial mechanics, *Chaos*, 10, (2000), 427–469.
- **Marsden, J. E., T. S. Ratiu and J. Scheurle**, Reduction theory and the Lagrange–Routh equations, *J. Math. Phys.*, 41, (2000), 3379–3429.

## ■ Code

Note: Do not add `\pause` in the list of references. The command `\refitem` will produce bulleted items in a reference list.

```
\begin{description}
\refitem
  \href{http://www.cds.caltech.edu/~marsden/stc/KoLoMaRo2000_abs/}
  {Koon, W.~S., M.~Lo, J.~E.~Marsden and S.~Ross},
  Heteroclinic Connections between periodic orbits and resonance
  transitions in celestial mechanics,
  \textit{Chaos}, {\bf 10}, (2000), 427--469.

\refitem
  \href{http://www.cds.caltech.edu/~marsden/stc/MaRaSc2000_abs/}
  {Marsden, J.~E., T.~S.~Ratiu and J.~Scheurle},
  Reduction theory and the Lagrange--Routh equations,
  \textit{J.~Math. Phys.}, {\bf 41}, (2000), 3379--3429.
\end{description}
```

The End

# The End

Typesetting Software:  $\text{\TeX}$ , *Textures*,  $\text{\LaTeX}$ , hyperref, texpower, Adobe Acrobat 4.05  
Graphics Software: Adobe Illustrator 5.0.1  
 $\text{\LaTeX}$  Slide Macro Packages: Wendy McKay, Ross Moore