

Cassiopeia 2.2.2 Release Notes

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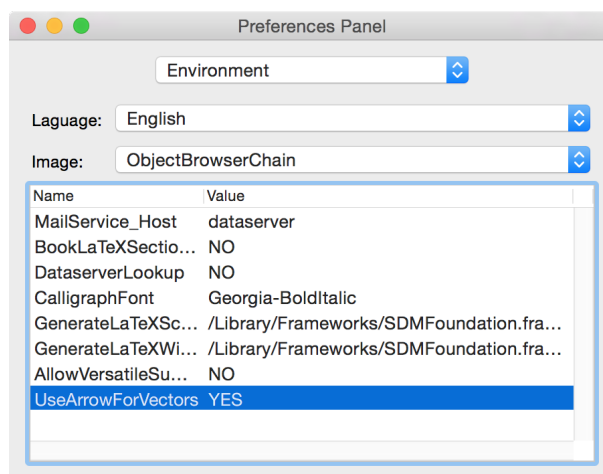
1 Dot Notation for time derivatives

The short notation for a derivative with respect to time is usually a dot accent over a letter, e.g. \dot{s} for the first derivative and \ddot{s} for the second derivative. In earlier versions of Cassiopeia time derivatives had to be written as ds/dt . As of v2.2.2 the short notation is supported (for presentation only).

Use the key sequence "s Ctrl-a 1" to get \dot{s} and "s Ctrl-a 2" to get \ddot{s} . This works for vectors as well. To get

$$\dot{\vec{r}}(t) = \begin{pmatrix} R \sin(\omega t) \\ R \cos(\omega t) \\ \nu t \end{pmatrix}$$

you would have to type (in formula mode) "r Ctrl-a v Ctrl-a 1 (t) ...". Note: Cassiopeia uses the little vector arrow to represent vectors when the UseArrowForVectors setting is set to YES (Cassiopeia Preferences panel).



If you prefer the bold font alternative set this setting to NO.

$$\dot{\vec{r}}(t) = \begin{pmatrix} R \sin(\omega t) \\ R \cos(\omega t) \\ vt \end{pmatrix}$$

2 Function arguments

Functions arguments can also be vectors now. Type "A Ctrl-a v Ctrl-l outer (r Ctrl-a v , t) ..." to get

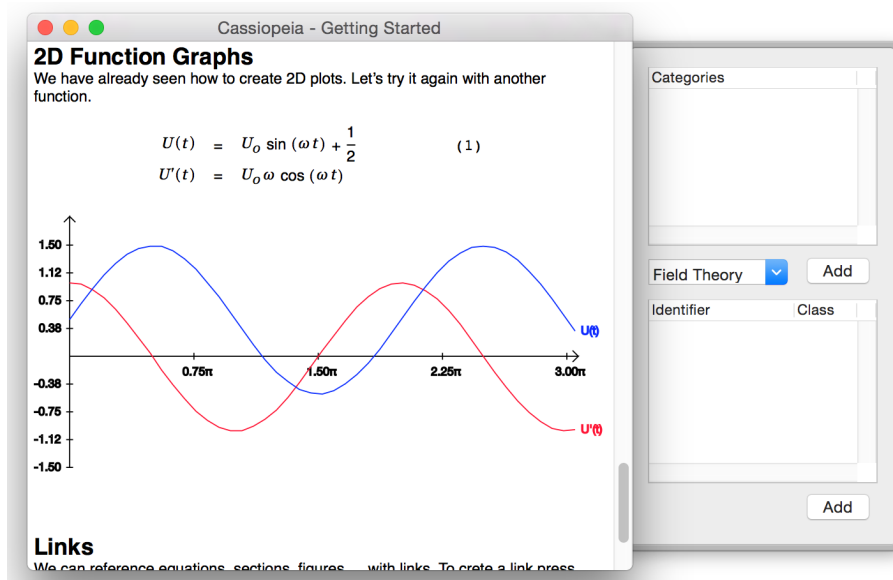
$$\vec{A}_{outer}(\vec{r}, t) = \begin{pmatrix} A_x \\ A_y \\ A_z \end{pmatrix}$$

3 New Accents

A couple of accents have been added to the "Vectors, Matrices and Accents" pane of the palette, e.g. "b Ctrl-a B" for \vec{b} , or "b Ctrl-a t" for \tilde{b} .

4 Adding Categories

In earlier versions document categories had to be dragged from Core - Document Categories to the Context Drawer (Command-Shift-C) of the document.



They can now be selected in a combobox and assigned by clicking on the *Add* button.