

Jumping to a Rectangular Region

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Introduction. This document demonstrates a technique designed to help people with low vision read material by providing them with a convenient way to magnify specific regions of the document. This is especially useful for reading technical material such as mathematics, as is demonstrated here.

Instructions: Click on any of the mathematics to magnify a region around it, the border will blink briefly to focus your attention on it. To restore the previous view, click on the region again, the formula is briefly highlighted by a blinking border so can quickly find your place in the document.

Sample Mathematical Text. Consider the problem of numerically solving the first order differential equation $y' = f(t, y)$ on $[t_{start}, t_{end}]$. Suppose we want to classify third order Runge-Kutta type methods. Start with

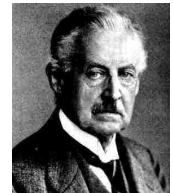
$$\begin{aligned}K_1 &= hf(t_n, y_n) \\K_2 &= hf(t_n + rh, y_n + aK_1) \\K_3 &= hf(t_n + sh, y_n + bK_1 + cK_2) \\K &= w_1K_1 + w_2K_2 + w_3K_3 \\y_{n+1} &= y_n + K\end{aligned}$$

Find the system of equations satisfied by $r, s, a, b, c, w_1, w_2, w_3$ that will make the above algorithm a third order method.

Inline links. Links can be provided within the text to jump to a magnified region that needs to be inspected more closely. The links below are different from the ones above. After jumping to a magnified rectangle, restore the preview view by clicking on the rectangle.

Carl Runge (1867-1944) was the third of four sons from a well-to-do German merchant family. He is remembered for his Runge-Kutta method for solving differential equations.

Martin Kutta (1867-1944) extended the Runge's method of solving ordinary differential equations. He is also known for his work on airfoils.



Carl Runge



Martin Kutta

This work was motivated by Mohsen M.

FX and verbatim text. The `\jsRect*` can “scoop up” verbatim text. We illustrate with several examples from the documentation.

Using the `\verb` command: `###&$$^&$$^$`

Jump to the `fitr` Package! Click on the verbatim region below to view the listing up close.

```
\renewcommand{\overlayPresets}{\H{I}\BG{} \BC{blue}\S{D}}%  
...  
Jump to the \jdRect*[adddestw=10bp,adddesth=10bp]%  
  {\fitrpkg} Package!
```

Now using `\jdRect`.

```
\renewcommand{\overlayPresets}{\H{I}\BG{} \BC{blue}\S{D}}%  
...  
Jump to the \jdRect*[adddestw=10bp,adddesth=10bp]%  
  {\fitrpkg} Package!
```