

Emulate the `persp()` plot and `filled.contour()` plot on **gridGraphics**

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1 What is gridGraphics

- Introduction

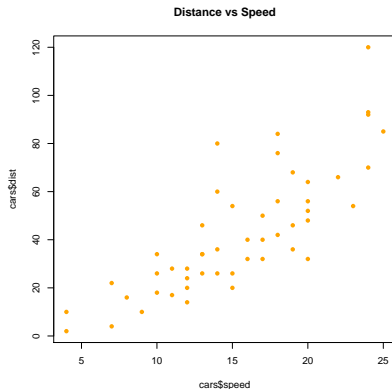
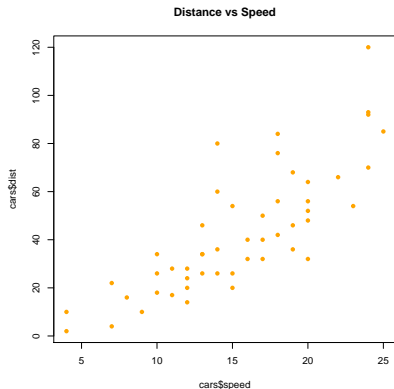
2 Second Section

What is **gridGraphics**...

gridGraphics is the **R** package that convert **graphics**-plot to **grid**-plot.

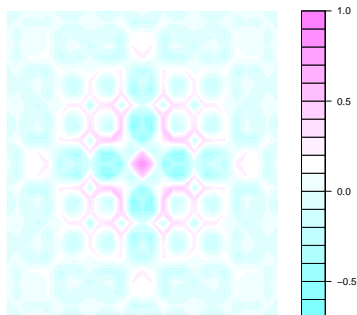
Example

```
> plot(cars$dist ~ cars$speed, pch = 16,  
+      col = 'orange', main = 'Distance vs Speed')  
> library(gridGraphics)  
> grid.echo()
```



The problem

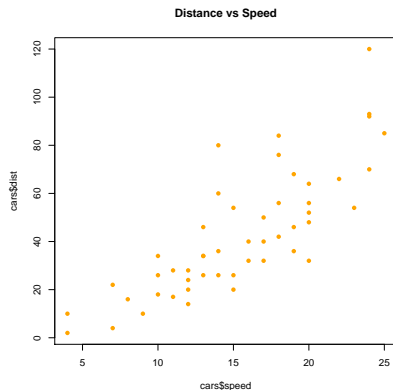
```
> x = y = seq(-4*pi, 4*pi, len = 27)
> r = sqrt(outer(x^2, y^2, "+"))
> filled.contour(cos(r^2)*exp(-r/(2*pi)))
> grid.echo()
```



How gridGraphics works?

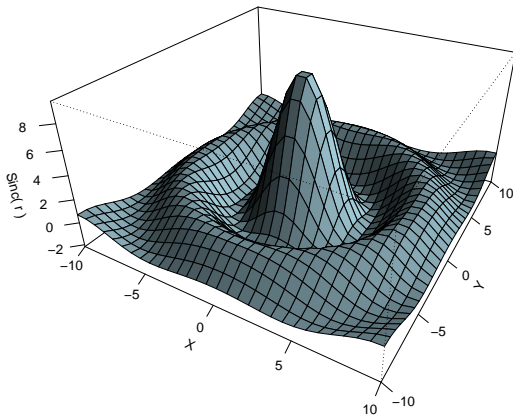
```
x <- recordPlot()  
unlist(lapply(x[[1]], function(y) y[[2]][[1]]$name))
```

```
"C_plot_new"  
"palette2"  
"C_plot_window"  
"C_plotXY"  
"C_axis"  
"C_axis"  
"C_box"  
"C_title"
```



How `gridGraphics` works?

```
> Sinc_Curve()
```



How **gridGraphics** works?

```
> x <- recordPlot()
> lapply(x[[1]], function(y) y[[2]][[1]]$name)

[[1]]
[1] "C_plot_new"

[[2]]
[1] "palette2"

[[3]]
[1] "C_persp"
```


Block 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer lectus nisl, ultricies in feugiat rutrum, porttitor sit amet augue. Aliquam ut tortor mauris. Sed volutpat ante purus, quis accumsan dolor.

Block 2

Pellentesque sed tellus purus. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Vestibulum quis magna at risus dictum tempor eu vitae velit.

Block 3

Suspendisse tincidunt sagittis gravida. Curabitur condimentum, enim sed venenatis rutrum, ipsum neque consectetur orci, sed blandit justo nisi ac lacus.

Heading

- 1 Statement
- 2 Explanation
- 3 Example

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer lectus nisl, ultricies in feugiat rutrum, porttitor sit amet augue. Aliquam ut tortor mauris. Sed volutpat ante purus, quis accumsan dolor.

Table

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table: Table caption

Theorem

Theorem (Mass–energy equivalence)

$$E = mc^2$$

Example (Theorem Slide Code)

```
\begin{frame}  
\frametitle{Theorem}  
\begin{theorem}[Mass--energy equivalence]  
$E = mc^2$  
\end{theorem}  
\end{frame}
```

Figure

Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

An example of the `\cite` command to cite within the presentation:

This statement requires citation [?].

References



John Smith (2012)

Title of the publication

Journal Name 12(3), 45 – 678.

The End