

# Ultimate TikZ Figures for Publications

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## 1 Line Plots

Here is an example of a standard line plot with a legend.

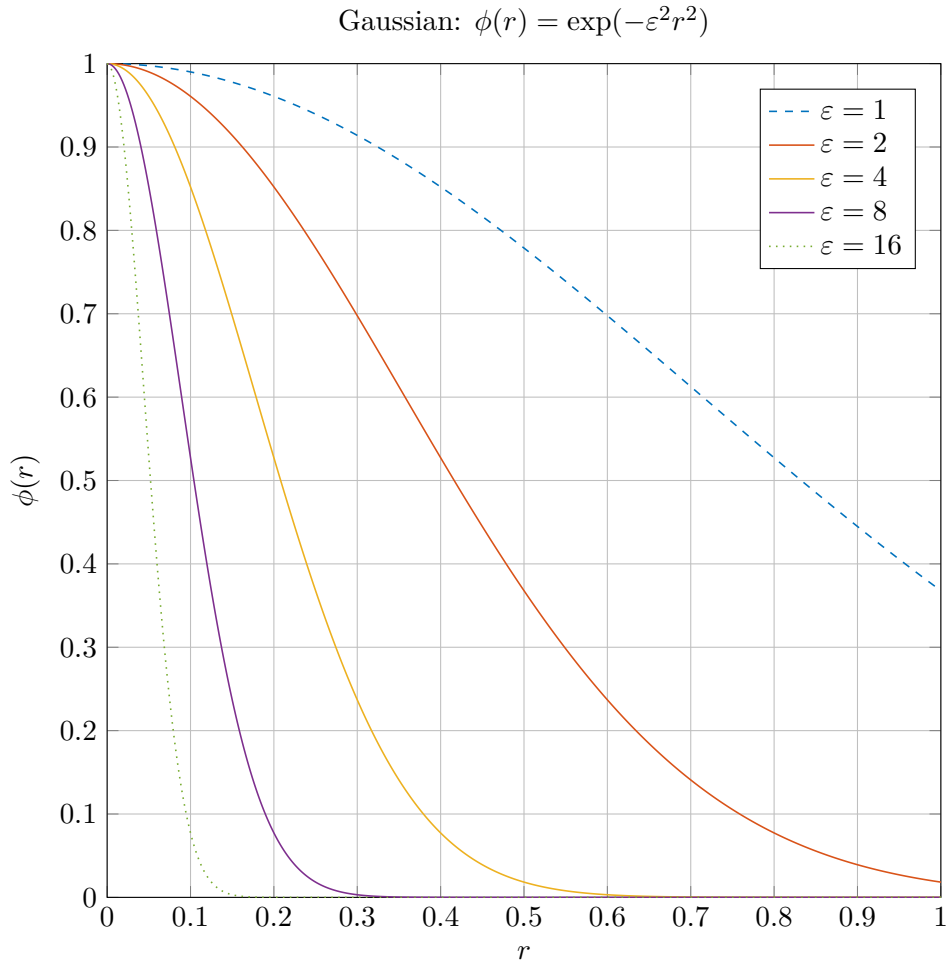


Figure 1: *Examples of GAs with different shape parameter values and PHSs of different degrees.*

## 1.1 Logarithmic Line Plots

This is an example combining two logarithmic line plots with different mark symbols.

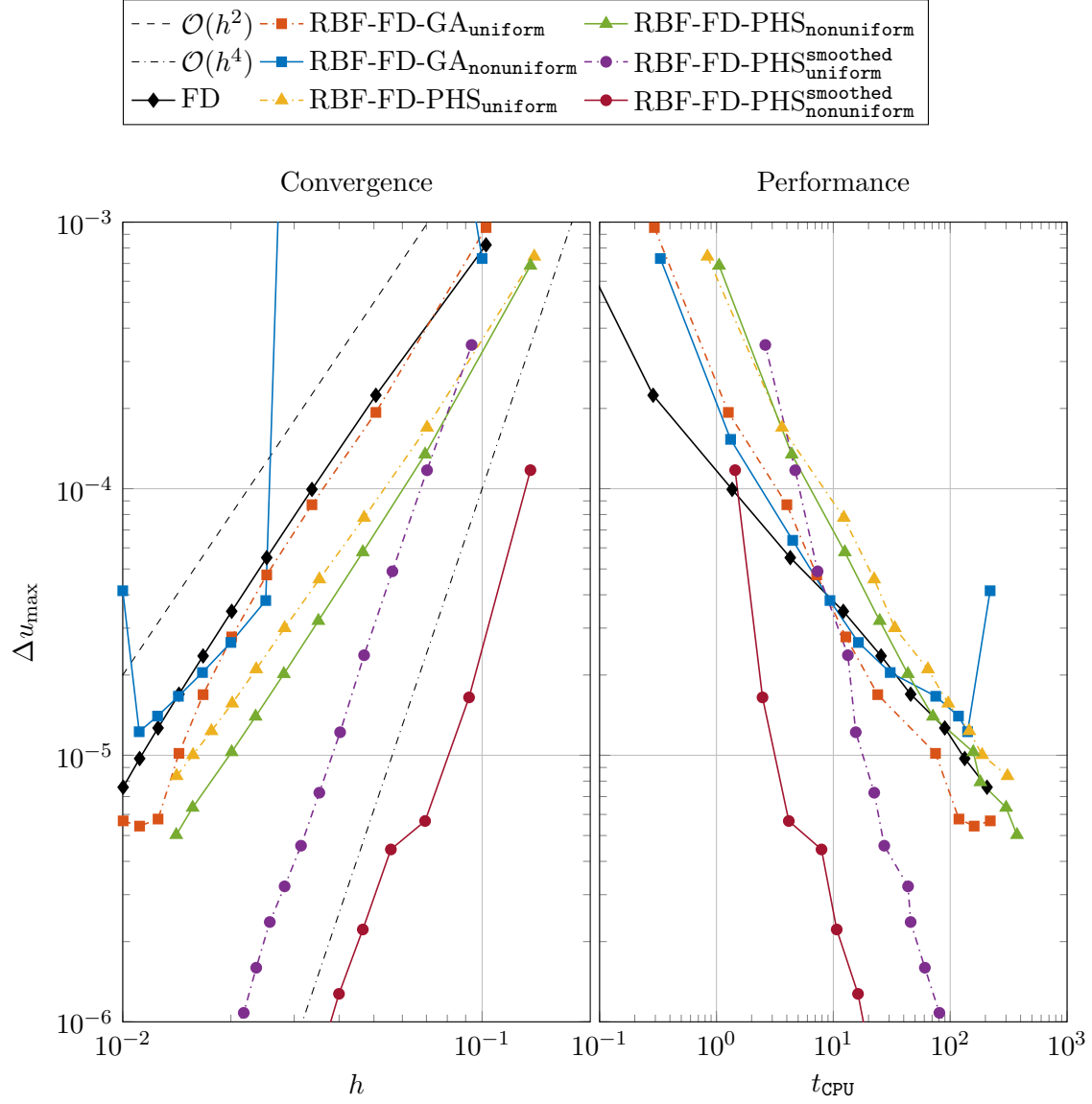


Figure 2: *Convergence and computational performance.*

## 1.2 Custom Ticks

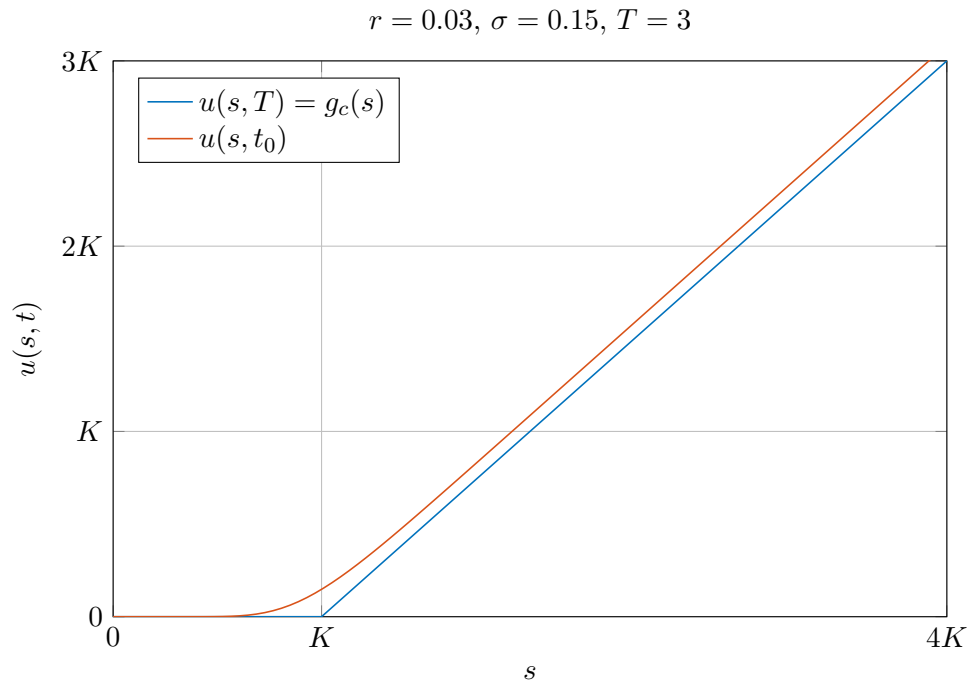


Figure 3: *Examples of GAs with different shape parameter values and PHSs of different degrees.*

### 1.3 Ribbon Plots

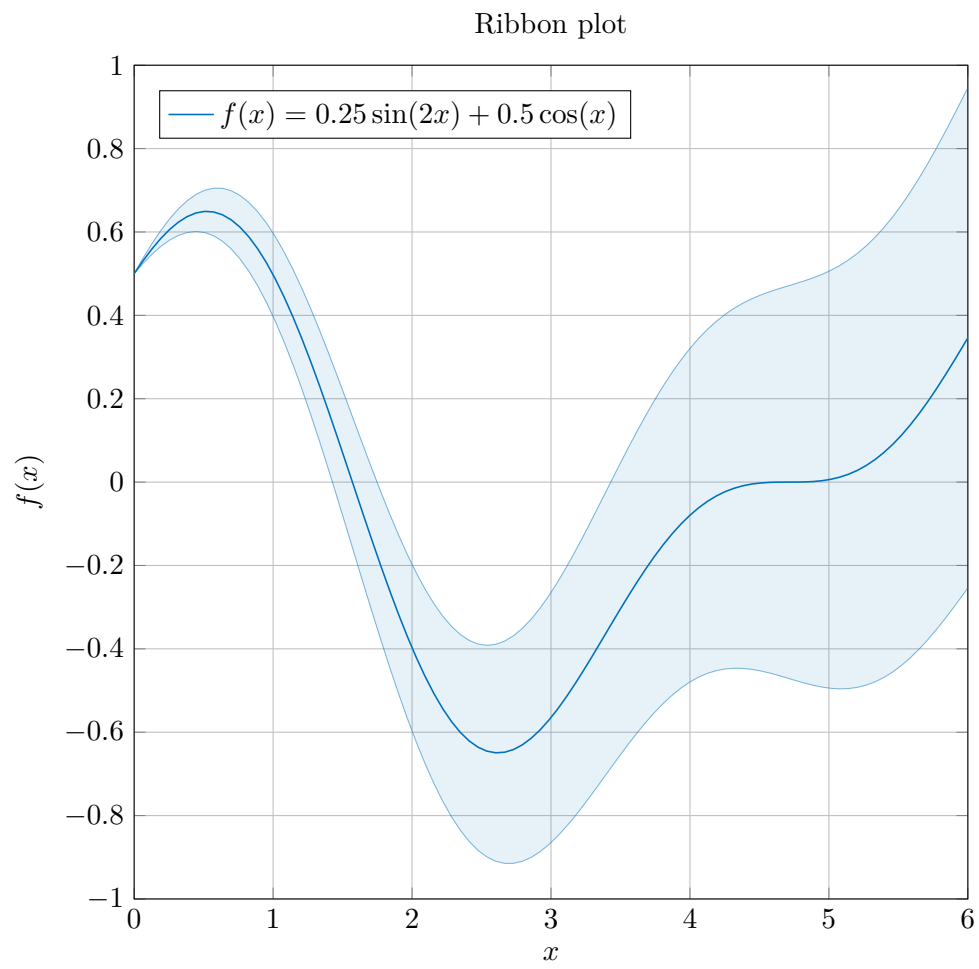


Figure 4: *An example of a ribbon plot.*

## 2 Scatter Plots

Here is an example of a scatter plot.

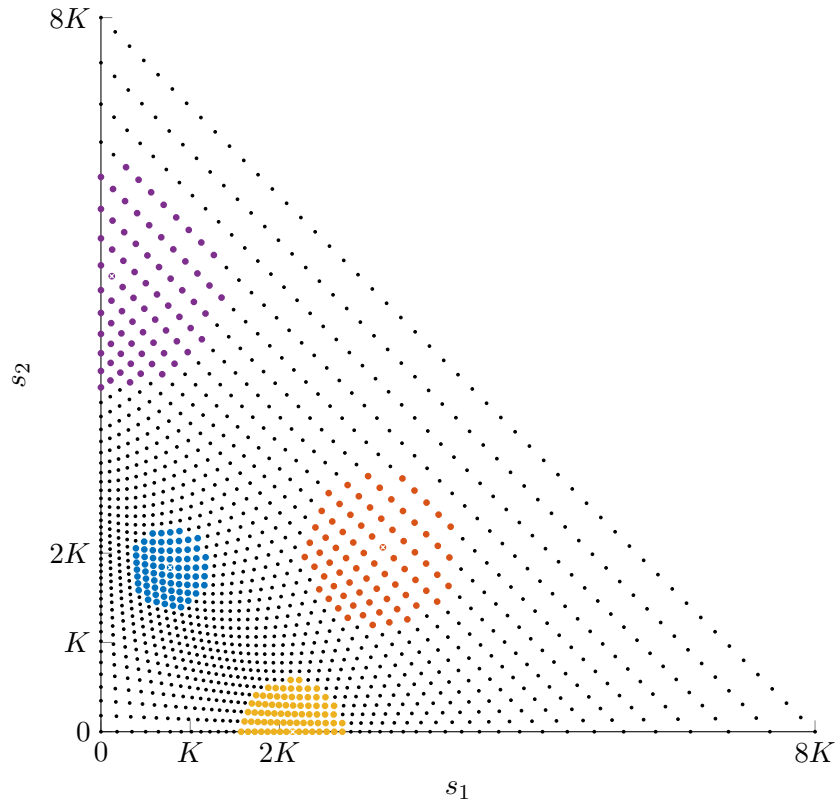


Figure 5: *A node layout.*

## 2.1 Different Dimensions

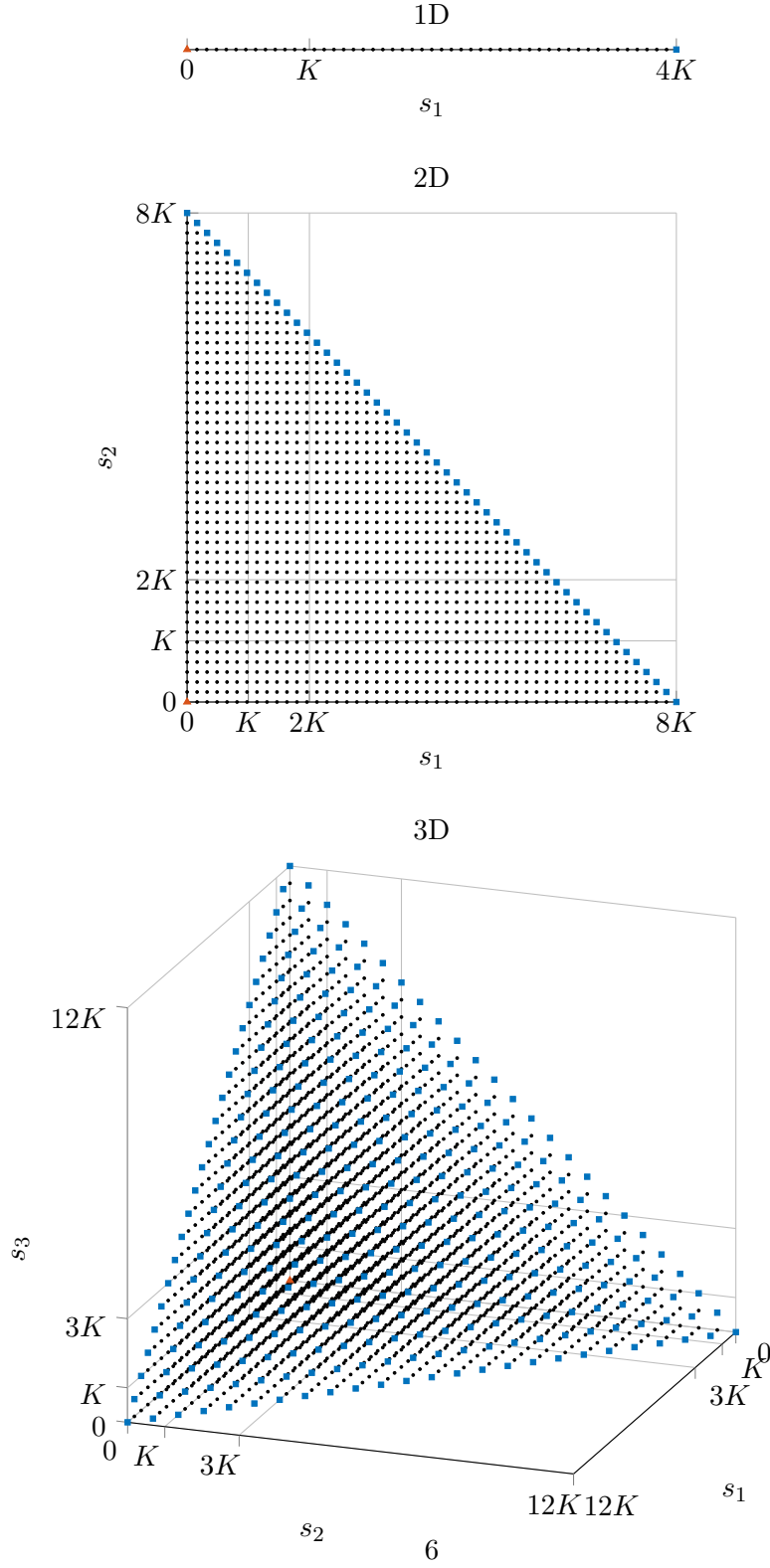


Figure 6: *Equidistant Cartesian grid based node layouts for pricing options with a different number of underlying assets. The close-field boundary conditions are enforced in the blue triangle node, and the far-field boundary conditions are enforced in the red square nodes.*

### 3 Histograms

Here is a basic histogram.

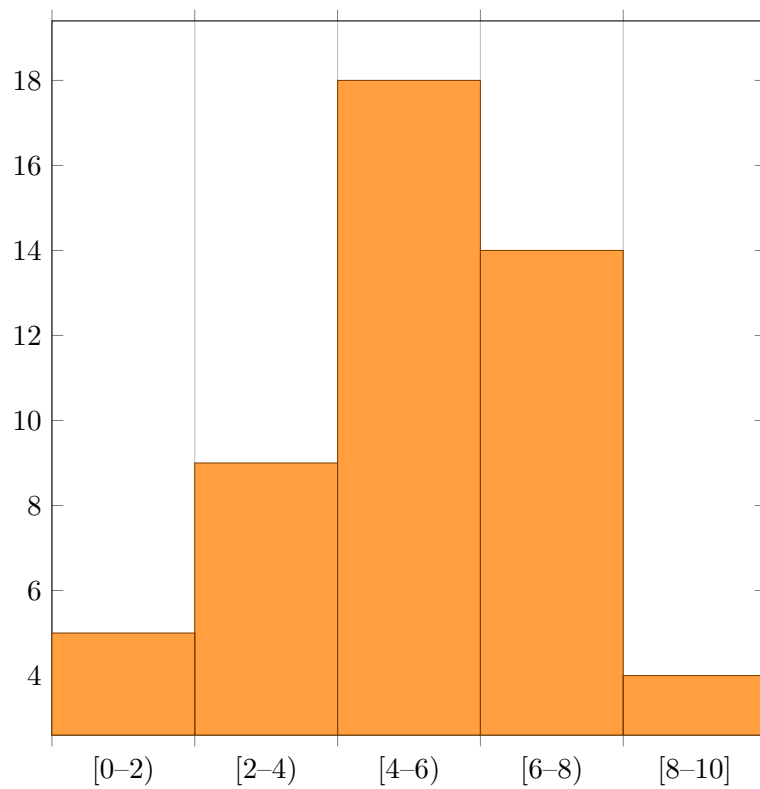


Figure 7: *A basic histogram.*

## 4 Embedded Bitmap

Color plots are usually not so easy to make in tikz, but they can be easily embedded in TikZ axes as bitmap images.

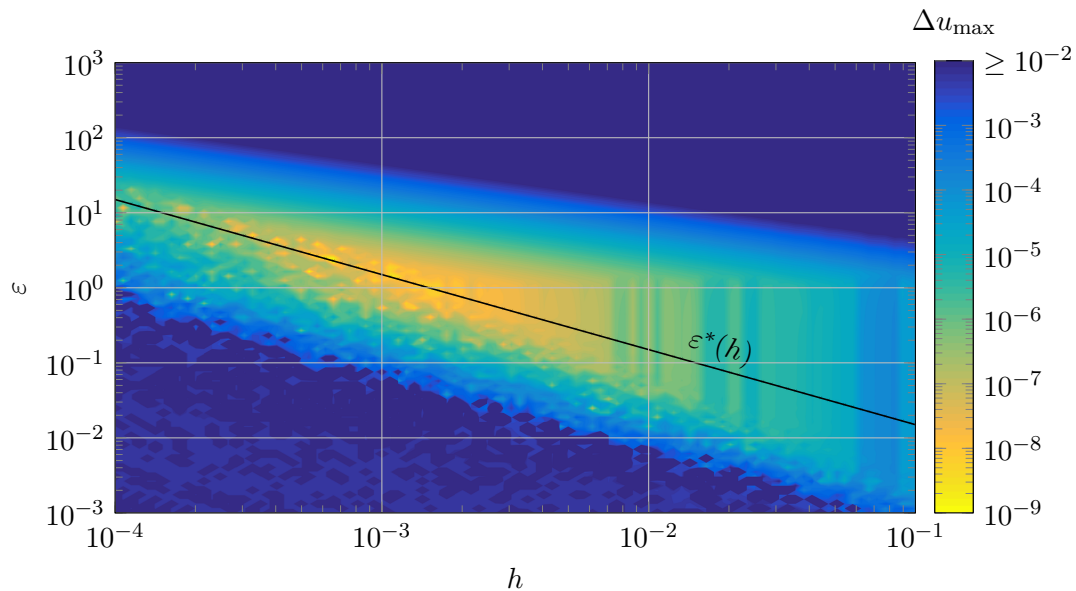


Figure 8: The maximum absolute error  $\Delta u_{\max}$  measured in the subdomain  $\hat{\Omega} = [\frac{1}{3}K, \frac{5}{3}K]$  around the strike price  $K$ , as a function of  $h$  and  $\varepsilon$ , for a one-dimensional European call option priced on an equidistant Cartesian grid with RBF-FD stencil size  $n = 3$ . The black line shows the appropriate choice for the shape parameter. The RBF-FD approximation is performed using GA basis functions.