6 Graphing Functions

The function \texttt{fplot} plots a curve. Functions can also be graphed by creating an array of points (that the system joins by line segments) using for example the function \texttt{plot}. Here is code to generate two plots of the function $f(x) = e^{-x^2}$ (which might ring a bell): one smooth, and one with user-supplied steps.

\begin{verbatim}
eek = @(t) exp(-power(t,2));
fplot( eek );
hold on;
x = -4:4;
y = exp(-x.^2 );  % note the dot so that exp acts on x entry-wise
plot(x,y);
hold off;
\end{verbatim}

There are many ways to enhance the plot, do multiple plots, etc.