Demonstration of Useful \LaTeX\ Packages

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See the blog post [Six Useful \LaTeX\ Packages](https://icl.bitbucket.io/hpl-ai/)

Here is a footnote 1

Here is a long URL that needs to be broken across at line at a hyphen:  

\[ A = \begin{bmatrix} 12 & 3 & 0 \\ 0 & 10 & -1 \end{bmatrix}, \quad A = \begin{bmatrix} 12 & 3 & 0 \\ 0 & 10 & -1 \end{bmatrix}. \]

kg m/s², kg m/s²

\[
\begin{align*}
\text{>> } & \text{syms } x, \text{ int}(1/(1-x^4)) \\
& \text{ans = } \\
& \text{atan}(x)/2 + \text{atanh}(x)/2
\end{align*}
\]

1 function g = gf(A)
2 %GF Approximate growth factor.
3 % g = GF(A) is an approximation to the
4 % growth factor for LU factorization
5 % with partial pivoting.
6 [~,U] = lu(A);
7 g = max(abs(U),[],'all')/max(abs(A),[],'all');