

## Figures & Graphics

Using pdf $\LaTeX$  gives us more flexibility with image formats. Any image format may be used, as long as it's one of PDF, JPG or PNG—and any image you have can be losslessly converted to one of these three. A brief description of the file types:

1. PDF graphics are best used for vector diagrams; see Figure 1 for an example;
2. PNG graphics are lossless raster images used for precise bitmap images; see Figure 2 for an example.
3. JPG graphics are compressed bitmaps usually used for photos; see Figure 3 for an example;

Figures are placed as floats, so that  $\LaTeX$  can place them in the most appropriate place in your document. The `\includegraphics` command is what places the graphic.

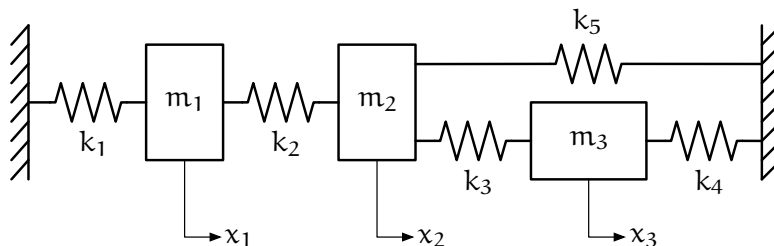


Figure 1: An example PDF diagram. It can be infinitely re-scaled without loss of quality while retaining a small file size (try it and see!).

See the document “Using imported graphics in  $\LaTeX$ ”<sup>1</sup> for more information. It refers only to EPS files, but the information it has is still accurate. It was written before pdf $\TeX$  but the techniques it covers are still 100% relevant. If you actually *want* to include EPS figures, use the `epstopdf` package, which will convert them on the fly as it goes.

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<sup>1</sup><http://www.ctan.org/tex-archive/info/epslatex.pdf> if it's not on your computer



Figure 2: An example PNG image. Useful for bitmap pictures with exact output required.



Figure 3: An example JPG picture. This format is good for photos because the compression is efficient but lossy.