Session – 23 : Inserting figures in a LaTeX file
16-10-2019, 11:00 – 12:00 Hrs, RJN 302

[1] The figure environment

The figure environment needs the graphicx package that helps with resizing and positioning the image. Use the ".eps" format to insert images for latex to process. If you have other formats, use pdflatex directly. Make sure the figure file is in the same directory as the latex document.

[2] A sample tex file

```
\documentclass[11pt,a4paper]{article}
\usepackage[left=2cm,right=2cm,top=2cm,bottom=2cm]{geometry}
\usepackage{graphicx}
\author{Gandham Phanikumar}
\title{My Second LaTeX document with a figure}

%-------------------------------------

\begin{document}

\date{October 16, 2019}
\maketitle

\section{Introduction}

There are two major types of images.

\begin{enumerate}
      \item Raster images that contain pixel information. Popular formats are
bmp, png, gif, jpg and tif.
      \item Vector images that contain object definitions and are rendered as
per their size. Popular formats are eps, ps, pdf and svg.
\end{enumerate}

LaTeX can process eps files to include figures. If you need to insert other
formats, use pdflatex. You can always convert images across formats using tools
such as imagemagic on command line and gimp that works like Adobe Photoshop.

\section{Error function}

Here is a plot of error function.

\begin{figure}[h]
      \begin{center}
            \framebox{
                  \includegraphics[scale=0.7]{erf.eps}
            }
      \end{center}
      \caption{A plot of error function made using sagemath.}
      \label{erfplot}
\end{figure}

You can refer to the figures using the ref command. For example, we can say we
```

```
have shown the plot of error function in figure~\ref{erfplot}. Compile twice to
ensure that the reference to the figure is available and typeset. The label
command comes after the caption command inside the figure environment.

\end{document}
```

The output of the above LaTeX file is in the following pages.

My Second LaTeX document with a figure

Gandham Phanikumar

October 16, 2019

1 Introduction

There are two major types of images.

1. Raster images that contain pixel information. Popular formats are bmp, png, gif, jpg and tif.
2. Vector images that contain object definitions and are rendered as per their size. Popular formats are eps, ps, pdf and svg.

LaTeX can process eps files to include figures. If you need to insert other formats, use pdflatex. You can always convert images across formats using tools such as imagemagic on command line and gimp that works like Adobe Photoshop.

2 Error function

Here is a plot of error function.

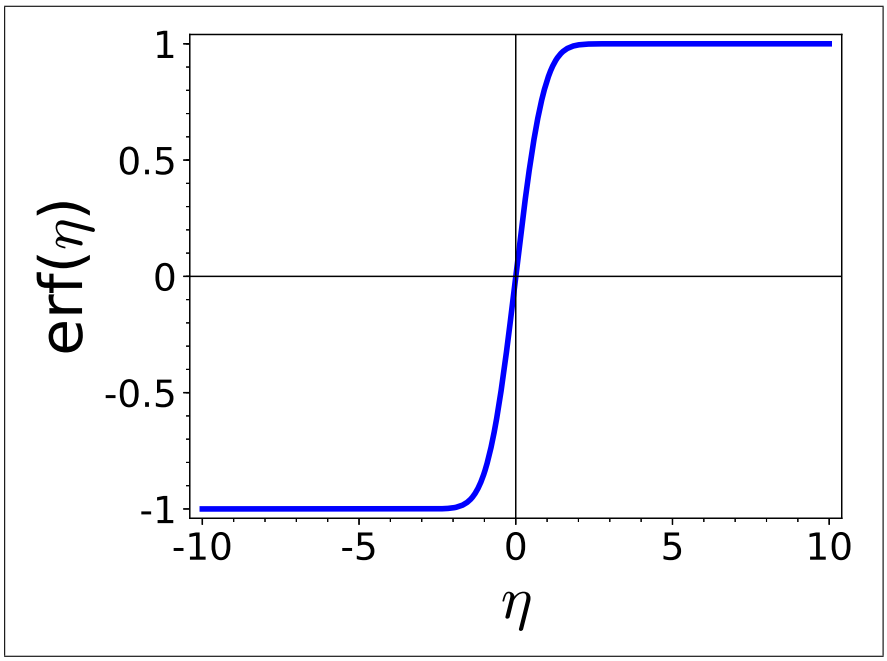

Figure 1: A plot of error function made using sagemath.

You can refer to the figures using the ref command. For example, we can say we have shown the plot of error function in figure 1. Compile twice to ensure that the reference to the figure is available and typeset. The label command comes after the caption command inside the figure environment.