Phase Portraits - **pplane6**

- The routine **pplane6** is already loaded on all PUCC machines as standard software. If you are using your own copy of MATLAB you may need to download **pplane6**. Here is a link :

  http://math.rice.edu/~dfield/

  (Note: **pplane5** is an older version of **pplane6**.)

- To access **pplane6**, at a MATLAB prompt type: **pplane6**

- A popup window will appear (similar to that for **dfield6**).

- Correctly enter your system of differential equations and the range of values of the independent and dependent variables. Hit **Proceed** and a graphics window will appear with the direction field of your system of differential equations. Click the mouse at any point and the corresponding trajectory through that point will be plotted.

- There are several options available in the graphics display window : printing, keyboard input of initial conditions, inserting text, erasing solutions, zoom, etc.

- You may have up to four parameters to quickly vary your differential equations (rather than having to retype the same differential equations with different constants).

- **pplane6** is very similar to **dfield6** in its syntax and use.