

## Phase Portraits - **pplane7**

- The routine **pplane7** is already loaded on all ITaP machines as standard software. (If you are using your own copy of MATLAB you may need to download **pplane7** from <http://math.rice.edu/~dfield>)
- You may also access MATLAB (Matlab 7) through the *Citrix Client* :  
  
<https://goremote.ics.purdue.edu/Citrix/MetaFrame/site/default.aspx>
- To access **pplane7**, at a MATLAB prompt type: **pplane7**
- A popup window will appear similar to that for **dfield7** (see below).
- 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 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 six (6) parameters to quickly vary your system of differential equations.
- **pplane7** is very similar to **dfield7** in its syntax and use.

