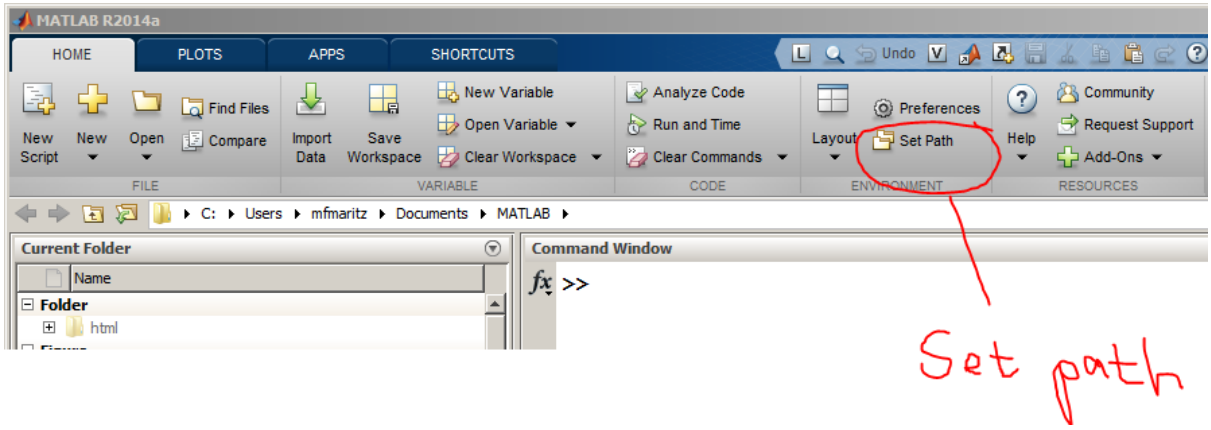
D3 set of MATLAB functions

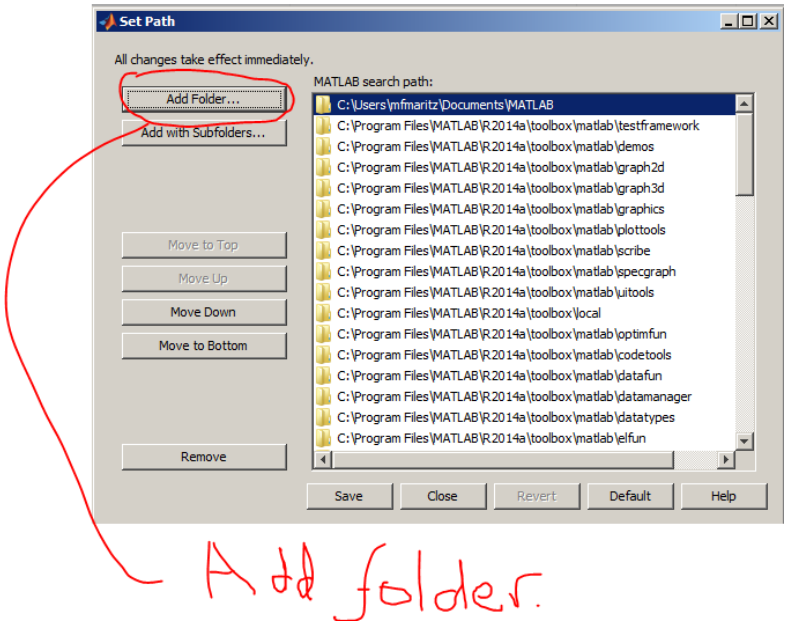
The set of D3-functions were compiled for displaying the following objects in 3D: Points, Vectors, Vector functions (i.e. space curves), Lines, Planes, Surfaces, Contours (2D), Vector fields, Gradient vectors, Coordinate systems, etc.

Setting the path:

In order to access these functions, once MATLAB is opened, go to the top bar and press [Set Path]:



The following window will open:

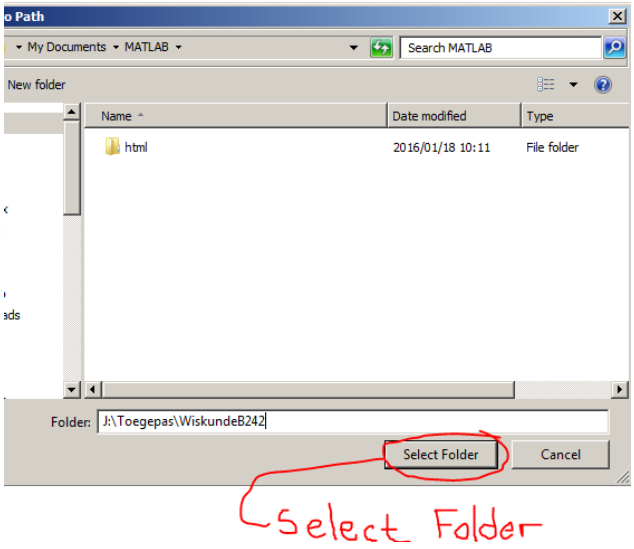


Then press [Add Folder]. In the file dialogue window (or directory browser) select the following path:

J:\Toegepas\WiskundeB242

(Alternatively, you may type instead
\\stbrga\pool\ing\data\Toegepas\WiskundeB242
in the bottom field labelled ‘Folder’.)

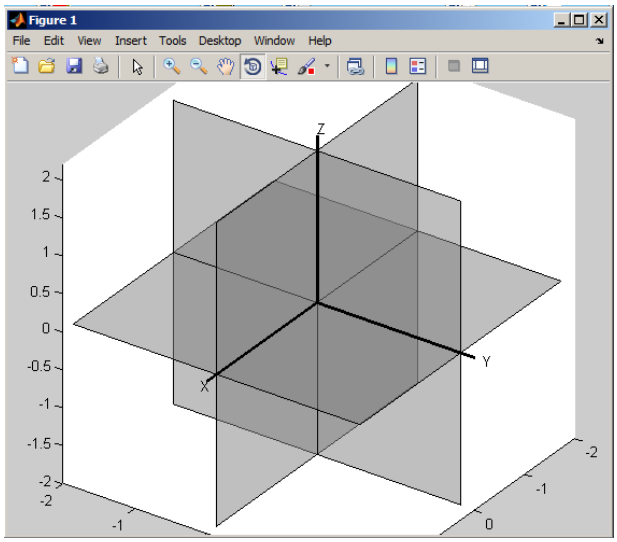
Then press [Select Folder] at the right bottom position:



In the command window you may then type

>> D3axis

and check that the following figure is displayed:



This verifies that the path is set correctly.

Help with the functions:

In order to see a list of available functions, type

>> D3contents

In order to get help for a particular function, for example D3vector, type

>> help D3vector

Here is a list of useful functions:

D3axis - draws a system of axes
D3point – plots a point in space
D3vector – plots an arrow (a vector) in space
D3line - plots a line in space
D3plane – plots a plane in space using a normal to the plane
D3plane2 – plots a plane in space using two orientation vectors in the plane
D3surface – plots a surface in space