The Settings Menu

The 3D-XplorMath Consortium

We give here only very brief indications of what various settings accomplish. See the HTML documentation of the Settings menu for further details.

Set Resolution & Scale... controls how many points and lines are shown in parametrized curves and surfaces, and how many pixels there will be per unit of length.

Set t,u,v ranges... sets the intervals on which the parameter t defining a parametric curve and the parameters u,v defining parametric surfaces are defined.

Set Parameters allows changing the parameters on which a selected object depends. Look at the ATO (About This Object) of an object to see how it depends on the parameters.

Set Morphing allows making different animations of the selected object.

Set Object Translation... sets the value of a vector that is used to translate a 3D object just before it is translated. (However, it is easier to set this vector by dragging the object with eiter Command pressed (for translation in the image plane or Shift and Option pressed (for translation orthogonal to the image plane.

Set Number of Frames... allows the setting of the number of frames in an animation filmstrip.

Set Light Sources is a submenu that allows changes to many different settings involving the various lights that illuminate a 3D object, in particular their colors and directions.

Set Rotation Axis controls the axis about which an object rotates when one choses Rotate from the Animate menu.

Set Viewpoint allows the setting of the point from which a 3D object will be viewed. (But it is easier to set this using the mouse to drag the object into the desired orientation.)

Set Focal Length... sets the distance from the Viewpoint to the image plane.

Set Eye Separation... can be used to fine-tune the sensation of depth in stereo mode by choosing the distance between the two viewpoints on which the various stereo images are based. Eye Separation Multiplier is used to adjust stereo viewing to lecture rooms: all Eye Separations are multiplied by this factor. For a seminar room, try 0.4.

Set Clipping Distance... can be used to look inside closed surfaces. Anything closer to the Viewpoint than clipping distance will be invisible (so something behind it will be revealed).

Set Timings controls how fast the drawings are made and how fast the animations proceed.

ODE Settings allows various data associated to the solution of an ODE to be changed (in particular, initial conditions).