Mouse And Keyboard Controls

The 3D-XplorMath Consortium

For easy reference, we collect here various ways of controlling 3D-XplorMath using the mouse and/or special key combinations.

ABORT   Command period, Escape, or just holding down the mouse button will usually abort any ongoing operation. (The first two are equivalent and usually work instantly, while holding down the mouse will often permit some intermediate operation to complete before aborting.) Clicking the mouse is the correct way to stop the further evolution of an ODE or PDE initial value problem.

CREATE   Command K. After selecting an object, and changing various settings, press Command K to re-create the object with the new settings. (This is equivalent to choosing Create from the Action menu.)

PAUSE   To temporarily pause the program, press the space-bar. (The program continues from where it left off when the spacebar is released.)

QUIT   Command Q

ROTATE   To Rotate a 3D object just drag it with the mouse. A surface is usually rotated in wireframe, but engaging Caps-Lock will rotate a surface in a rough patch mode. The object will continue to rotate after you release the mouse button until you click the mouse again (or type Escape or Command Period). During the continuation, the CapsLock continues to work, and if

you hold down TAB the object will be rendered in high quality patch mode (but perhaps very slowly).

SELECT　In both the Plane Curve and Conformal Map categories, if the Command key is depressed, the cursor changes to a cross. You may then use the standard Macintosh technique to create a selection rectangle surrounding a part of the screen (click the mouse on the upper-left corner and drag to the lower-right corner). When the mouse is released (with the Command key still depressed) the contents of the rectangle will be zoomed to fill the whole window.

SWITCH　In the Conformal Map category, to see the pre-image rather than the image, press Command and Option and hold down the mouse button.

TOP SPEED　In many situations, rendering has been purposely slowed down in order to make certain features more clearly evident. To make the rendering process proceed at top speed, hold down the Delete key.

TRANSLATE　To Translate a 3D object hold down the Control key while dragging it with the mouse. (A surface is usually translated in wireframe, but engaging Caps-Lock will translate a surface in patch mode.)

ZOOM　To zoom a 3D object, hold down the SHIFT key while dragging the mouse vertically. (A surface is usually zoomed in wireframe, but engaging Caps-Lock will zoom a surface in patch mode.) This kind of zooming merely changes the magnification of the object. If you are in stereo mode and want to make the object really zoom towards or away from you, hold down the Option key as well as the SHIFT key (and be prepared to duck).