

## Exercises for Lecture 3: TOPs Part 2

1. Place a Composite TOP and give it a still image, a movie and a Ramp TOP as input. Experiment with changing the order of the three inputs. Experiment with changing the compositing operation (the Operation parameter in the Composite Page). Change the ramp parameters and see what effect this has on the output. Insert Level TOPs between the inputs and the Composite TOP and experiment with changing the parameters of these Level TOPs. Use the Preview Grid to give you an overview of the various different effects possible using the inputs. Finally experiment with changing the Fixed Layer on the Transform Page of the Composite TOP and with automatic changing of the values in the various transformation parameters (i.e., Translate, Scale, Rotate, etc.).

2. Create a rendering setup using a Render TOP, a Geometry COMP, a Camera COMP and a Light COMP. Add a second Geometry component and assign a material to it (e.g., a Phong MAT). Rotate this second Geometry component by 90 degrees and change the properties of the Phong MAT so that the object looks something like this:



Now set the Transparency parameter of the Render TOP to “Order Independent Transparency” and reduce the value of the “Alpha Front” parameter in the Phong MAT, so that the second geometry (torus) becomes partly transparent. Experiment with moving the camera and the light by making their viewers active and then moving them around using your mouse.

3. Place a CHOP To TOP in your network along with a Noise CHOP. Give the Noise CHOP 100 channels and set it as the value of the CHOP parameter of the CHOP to TOP. Experiment with changing the values in the Data Format and Image Layout parameters of the CHOP to TOP. With the Data Format set to RGB and the Image Layout set to “Fit to Square”, experiment with changing the parameters of the Noise CHOP (especially, observe the different characteristics of the various types of noise).

4. Place a Reorder TOP in your network and give it a Movie, an image and a Ramp TOP as input. Experiment with changing the input channels used to produce the output RGBA channels. Now add a Displace TOP to your network and set the output of the Reorder TOP as its first input (Source Image) and the set the Movie as its second input (Displace image). Experiment with changing the Horizontal and Vertical Source parameters of the Displace TOP.