**Blue Waters Petascale Semester Curriculum v1.0**

**Unit 7: CUDA**

**Lesson 4: Volume Rendering**

**Sample Assessment**

*Developed by Michael D. Shah for the Shodor Education Foundation, Inc.*

1. How does volume rendering work? Specifically describe the layered texture approach.
2. Where can CUDA be used to accelerate volume rendering?

For this assessment, students should:

1. Run the example, and take some time to learn about how a simple volume render works.
2. Students may experiment with the transfer function to see how it affects the overall rendering.
3. Students should also try uploading their own image in the volume render.



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