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

**Unit 7: CUDA**

**Lesson 11: Branching and GPGPU Efficiency (profiling and debugging)**

**References / Further Reading**

*Developed by David A. Joiner for the Shodor Education Foundation, Inc.*

[Cornell Virtual Workshop: Thread Divergence](https://cvw.cac.cornell.edu/gpu/thread_div)

[CUDA Warps and Branching](http://gpuray.blogspot.com/2009/07/cuda-warps-and-branching.html)

[Best Practices Guide :: CUDA Toolkit Documentation](https://docs.nvidia.com/cuda/cuda-c-best-practices-guide/index.html)



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*Browse and search the full curriculum at*[*http://shodor.org/petascale/materials/semester-curriculum*](http://shodor.org/petascale/materials/semester-curriculum)

*We welcome your improvements! You can submit your proposed changes to this material and the rest of the curriculum in our GitHub repository at*[*https://github.com/shodor-education/petascale-semester-curriculum*](https://github.com/shodor-education/petascale-semester-curriculum)

*We want to hear from you! Please let us know your experiences using this material by sending email to* [*petascale@shodor.org*](mailto:petascale@shodor.org)