

Parallel Computing: Homework IV

This will be your fourth homework in the exercise parallel computing. Send your solution to Matthias.huy@daimonas.de until January 16th 08.00pm. Prepare a pdf file for your written text and attach the source code of your program to the mail.

If one week is not enough for the task, just send me an email. If there are any further question, feel free to ask.

CUDA 5.5 is now available on the Cluster.

Task I (30 points)

Implementation of a FV-Solver

In this task you need to implement the missing parts of the FV-Solver and test the solver with different parameters. The file is named *SWE_Block.cu*

- a) Implement the missing parts. They are marked in the code. (*Search for a comment which starts with TO-DO. Implement the missing part below.*)
- b) Test your code with different parameters.

The resulting vtk files will be placed in your home directory.

Note: These files can become really large! With parameters $x=y=512$ each resulting vtk-file has a size of around 10mb!