

## READ CAREFULLY AND FOLLOW THE INSTRUCTIONS

This year again, I am very happy to be able to announce that we will be able to use resources from NERSC: National Energy Research Scientific Computing Center. We will share our computational quota, so please be careful how to use the resources. Note that any resource usage is logged.

Please apply for an account at NERSC via the following link  
[https://nim.nersc.gov/nersc\\_account\\_request.php](https://nim.nersc.gov/nersc_account_request.php)

**Deadline: Monday 18th September, 10am.**

Proceed as follows in order to fill out the form:

- Select **standard account** as account.
- Use your **SDU email address**, i.e., `YOURNAME@student.sdu.dk`, please verify with the list of students provided as email).
- As “preferred username” please use the prefix of your email address (and verify in the list of students provided as email)
- In the field “Organization” please write “University of Southern Denmark (SDU), Department of Mathematics and Computer Science (IMADA)”
- Use `+45 XX XX XX XX` as a format for your phone number (don’t use a fake phone number, you might have to call in order to reset your password).
- In the field “Principal Investigator and repository name” write:  
**David Skinner, Daniel Merkle, Repository: m947.**
- In the description write:  
**DM818 (Parallel Computing) course at the University of Southern Denmark (SDU).**

After submission you need to agree to the account usage policy. Subsequently I will approve your application and it is then handed over to NERSC. Please note, that NERSC is taking security and account policy very seriously.

In order that you can start working immediately, the first mandatory assignment is already published. It can be explained rather easily: try to multiply 2 matrices as fast as possible on one core. This might seem like a surprising exercise for a course on parallel computing, but you will learn that a good algorithm for this problem will follow very similar algorithmic design principles as the parallel implementation for the same problem, namely: you want to be able to access data that you need fast (i.e. from cache).