

# Instructions

The file `poisson2d.cuf` is to be GPU-accelerated using Kernel Loop Directive (CUF kernels).

## Jacobi solver with Kernel Loop Directives

Please have a look at the file and work on the indicated lines (see 'TODO's).

- `!$cuf kernel do[(n)] <<< grid, block[optional stream] >>>` can be used to accelerate the loop. `n` is the depth of the loop.

```
!$CUF Kernel Do(3) <<<*,*>>>
```

- Use Fortran array notation to transfer data.

```
myArr=myArr_d
```

- Compare the results with the explicit kernel version.
- Be sure to load the custom modules of this task.

```
source setup.sh
```

- For compilation, use

```
make
```

- To run your code, call `srun` with the correct parameters. A shortcut is given via

```
make run
```