

Instructions

The file `poisson2d.cuf` is to be GPU-accelerated using explicit Kernels.

Jacobi solver with explicit Kernels

Please have a look at the `poisson2d.cuf` file and work on the indicated lines (see 'TODO's).

- Use `device` attribute to declare device arrays.

```
integer, allocatable, device :: myInt(:)
```

- Use Fortran array notation for data transfer.

```
myArr=myArr_d
```

- The `global` attribute is necessary to specify your kernels.

```
attributes(global) subroutine mySub
```

- Use `<<<, >>>` to lunch your kernels.

```
call yourKernel<<<gridDim,blockDim>>>(arg1,arg2)
```

- Use `dim3` type to define variables for your lunch configuration.

```
type(dim3) :: blockDim, gridDim
```

- 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
```