Generate a run script

First step

There are several pre defined experiments available in the run-directory, listed as `exp.<experiment-name>`. To generate a run script for one of these experiments do

```
./make_runscripts <experiment-name>
```

Be careful not to forget experiment-name. make_runscripts will generate **all** possible runscripts otherwise. make_runscripts only works after configuring the model, as it needs the proper information of the compiler used.

The resulting runscript `exp.<experiment-name>.run`, for some experiments also a postprocessing script `post.<experiment-name>.run`, will be stored in the run-directory and might need additional editing.

Use your experimenter ID

In general and to simplify collaboration it is an established way to copy a given script according to our **personalized naming convention**, see List of IDs.

Adaptations for accounting and parallelization

Example: Run the script as developer abc on Levante:

Copy the exp.amip experiment-template to your personal experiment-id:

```
cp run/exp.aes_amip run/exp.abc0001
./make_runscripts abc0001
cd run
```

Edit the file exp.abc0001.run and change the model settings (account e.g. mh0287):

```
#SBATCH --account=mpiaes
to
#SBATCH --account=mh0287
```

```
#SBATCH --nodes=1
to
#SBATCH --nodes=100
```

This number of notes fit for the default setting of the script, which is R2B8 resolution.

Submit the job:

```
sbatch exp.abc0001.run
```

You can check the status of your jobs with:

```
squeue -u <user>
```

Results will be written to `icon-mpim/experiments/abc0001`

In case you want to run one month of this experiment in R2B8 you have to adapt the run time in the run script: Set the run time of the job to at least 5 hours, also depending on your amount of output:

```
#SBATCH --time=05:00:00
```

— *Monika Esch 2024/08/19 12:19*