Streptavidin affinity grids (SAG) lattice subtraction

Requested files :

- GridTools.py
- MRC_RW_3.py
- Pattern_Optimizer.py
- SAGsub_3-2_stable_parallel_Nils.py

Place them all in a SAGsub3 folder in your home directory (*~/SAGsub3/*)

Most of the required python libraries are already available on the python hpc. Only the mrcfile library is missing and should be installed on phantom-node39 (I already did it, but I am not sure if its available for other account then mine)

```
ssh login@hpc.igbmc.fr
ssh login@phantom-node39
module load python/3.9
pip3 install mrcfile
```

Go to the folder containing the motion corrected micrographs to which the lattice subtraction needs to be applied (it can be resumed if it was partially ran before). Rub the command:

```
python3 ~/SAGsub3/SAGsub_3-2_stable_parallel_Nils.py --force_apix 0.729
```

The *–force_apix 0.729* is for Krios2 datasets; it needs to be changed for the other microscopes/cameras

Useful commands:

- Ctrl+Z to put the job in background
- *fg* to bring the job to the foreground

You can check the results in the *SAGsub.star* file Format, with different columns:

1. Micrograph name
2. Mosaicity (should be 1 most of the time)
3. Discrepancy between simulated and optimized lattice (Ok up to a value of 1)
4. Success or fail (only tells you if the micrograph processing was done, regardless of the quality)