CTF selection exported

Wed, 11/18/2020 - 05:06
Hello,

I have been running some different CTF fitting with different parameters because my dataset (with Volta Phase Plate) looks fine for 1400/2400 images but a group of 1000 is not responding.

I found that adjusting the box size from 512 to 384 or 768 might a game-changer for some of these 1000 initially lost so I was wondering if I can perform this CTF fitting test in a separate analysis and then transfer back the information to the main .db (of which CTF setting was picked for each image). Is there a place where the selection is stored?

I am new to the field, so obviously if this doesn't create any theoretical problem...

Many thanks,

Alessandro Barbieri
alexis
In cisTEM you can run CTF

In cisTEM you can run CTF estimation several times. Let's say you run it 3 times on your full dataset, with box sizes of 385, 512, and 768. When you go to the Results > CTF panel, you will now see that there are 3 columns (#1, #2, #3), and for each image, 3 check boxes. By default, the 3rd checkbox will be checked for each image. This means that for further processing, cisTEM will use the results from the 3rd CTF fitting job (in this case, box 768).

But what you can do, for each image, is check the box corresponding to the CTF fitting results you like. For each image, click on the "eye" icon to visualize the result for each of the 3 CTF fit runs, and then place the checkmark in the column for the job that gave the best result.

That way, each image can have its CTF results coming from whatever CTF fit job worked best. When you then pick particles and extract them into a refinement package, cisTEM will know to use the correct CTF parameters for the particles coming from those images.

Hope this helps
Alexis

PS - you can use the 'n' and 'p' keys on your keyboard to quickly go to the next and previous image in the results list
Just as an addition to Alexis

Just as an addition to Alexis' answer - if you only want to run the job a subsection, you can make a group of images that only contain the images you want, and select that as the input in the Find CTF panel.

You can create a group from the Assets->images panel, then you can fill it by directly dragging the images you want, or by using the sort function in the CTF results panel.

Tim
Hello,

Hello,

Thanks for your kind answers, good that individual CTF can be applied, thanks for the advices about shortcuts and subgroups, I really needed some hints how to accelerate the process.

Best

Alessandro
Hello,

I have dozens of micrographs where even changing some parameters I don't get any Thon Rings and the 1D Plot is gone.

If I send you via email like 15 images could you please help me to check if they can be recovered?

Best,

Alessandro