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## **Angular distribution in cisTEM**

Wed, 03/10/2021 - 04:03

#1

Angular distribution in cisTEM

Hi!

I'm new to cisTEM (and to cryoEM in general). I have a question about the angular distribution plot in the refinement jobs. As I can see, only half of the distribution is shown (theta 0 to 90). Would be possible to obtain a full orientation distribution for asymmetric objects (such as the angdist.bild files in relion)?

And there uis (or will be in the future) the option to preform some a posteriori particle refinement (per particle motion correction, defocus and ctf correction etc) or I need to use other pakages? I didn't find anything in the documentation.

Thanks

Wed, 03/10/2021 - 16:24

timgrant

Hi Stefano,

Hi Stefano,

Yes the other half is projected back onto the 0,90 as they are equivalent - for example 135,0 is equivalent to 45, 180. So you only need to see half the sphere to guage your angular coverage.

If you want to see the true angles, you can go to results->3d refinement and click on the icon above the angular plot which looks like paper with a +. This will show you all the angles, and you can save them to a text file, but it won't plot them for you.

In the released cisTEM it is possible to do per particle defocus refinement by selecting it as an expert option in the manual refinement panel. In the development version there is a CTF refinement panel which handles per particle defocus refinement and beam tilt estimation. We do not have per particle motion correction.

Thanks!

Tim

Thu, 03/11/2021 - 02:58 (Reply to #2)

Hi Tim,

Hi Tim,

thank a lot for your reply!

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