4 Upcoming Meetings

4.1 18 Nov 2021 - blur/sharpen - Glaeser, Nogales & Chiu (GNC), 5 Map Validation (5.3)

–Pre-reading

- J Bernard Heymann (2021). 5.4 Estimates of alignment accuracy

–Questions

1. 5.4: How is estimating and address alignment accuracy a chicken-and-egg causality dilemma?
2. 5.4.1: Work through equation 5.2. What data are the symbols S and N referring to? What is the difference between 1 and 2? Is what situations would Ω refer to "single voxels, shells, or whole images in frequency space"?
3. 5.4.2: What might be the cause of the gradual vs abrupt drop of error in Figure 5.11 A (translation) and B (rotation)?
4. 5.4.3: What do each of the panels of Figure 5.12 mean?
5. : 5.4.6: What is the difference between particle "precision" and "accuracy" (Vargas et al, 2016)? If you have some data processing results handy that compute these metrics (e.g. in CryoSPARC), compare them. What is happening to your data inside the algorithm?
6. 5.5: How could computational methods developers study how reconstruction algorithms handle alignment accuracy during algorithmic development?