4 Upcoming Meetings

4.1 2022 - advanced treatment of rotations

–Pre-reading

1. (2020). A Smooth Representation of Belief over SO(3) for Deep Rotation Learning with Uncertainty. https://arxiv.org/pdf/2006.01031.pdf
2. (2021). Eliminating Topological Errors in Neural Network Rotation Estimation Using Self-selecting Ensembles. https://dl.acm.org/doi/pdf/10.1145/3450626.3459882
3. (2021). On the Continuity of Rotation Representations in Neural Networks. https://arxiv.org/pdf/1812.07035.pdf
4. (2013). Rotation Averaging. https://link.springer.com/content/pdf/10.1007/s11263-012-0601-0.pdf
5. (2021). Learning Rotation Invariant Features for Cryogenic Electron Microscopy Image Reconstruction. https://arxiv.org/pdf/2101.03549.pdf
6. (2020). SE(3)-Transformers: 3D Roto-Translation Equivariant Attention Networks. https://arxiv.org/pdf/2006.10503.pdf
7. Falorsi, L., de Haan, P., Davidson, T. R., & Forr, P. (2020). Reparameterizing distributions on Lie groups. AISTATS 2019 - 22nd International Conference on Artificial Intelligence and Statistics, 89. https://arxiv.org/pdf/1903.02958.pdf

4.2 2022 - assorted mathy cryoem papers

–Pre-reading

1. Tagare, H. D., Kucukelbir, A., Sigworth, F. J., Wang, H., & Rao, M. (2015). Directly reconstructing principal components of heterogeneous particles from cryo-EM images. Journal of Structural Biology, 191(2), 245?262. http://doi.org/10.1016/j.jsb.2015.05.007
2. Zivanov, J., Nakane, T., & Scheres, S. H. W. (2019). A Bayesian approach to beam-induced motion correction in cryo-EM single-particle analysis. IUCrJ, 6(1), 5?17. http://doi.org/10.1107/S205225251801463X
3. Katsevich, E., Katsevich, A., & Singer, A. (2015). Covariance matrix estimation for the cryo-em heterogeneity problem. SIAM Journal on Imaging Sciences, 8(1), 126?185. http://doi.org/10.1137/130935434