Methods Development

A major interest of the lab is the development and optimisation of methods for high-resolution cryo-EM. This has led us to investigate:

- Refinement of 3D reconstructions using single-particle images
- Particle selection from micrographs
- Resolution measurement
- High-resolution 3D reconstruction of helical specimens and filaments
- CTF estimation from electron micrographs
- DQE measurement of electron detectors
- Beam-induced motion during cryo-EM data collection
- Movie-collection and processing to enhance resolution in cryo-EM
- Magnification distortion correction in electron micrographs
- Likelihood-based classification of cryo-EM images
- Single-protein detection in crowded molecular environments in cryo-EM images
- Fast and user-friendly single-particle image processing

References


Source URL: http://grigoriefflab.janelia.org/methods