

Electron Crystallography of Protein Nano-Crystals

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Sub-micron protein crystals are beyond the range of standard X-ray diffraction experiments. Many proteins however fail to grow large, diffraction grade, crystals due to stacking faults. Using electron diffraction the structure can be solved of crystals that are 1-2 orders of magnitude smaller than what is standard using X-rays. In this talk I will show 3D electron crystallography data and the solved structure of lysozyme. I will touch on the possibilities and limitation of this new method and show recent advances in detector hardware that have enabled this exciting new field.

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