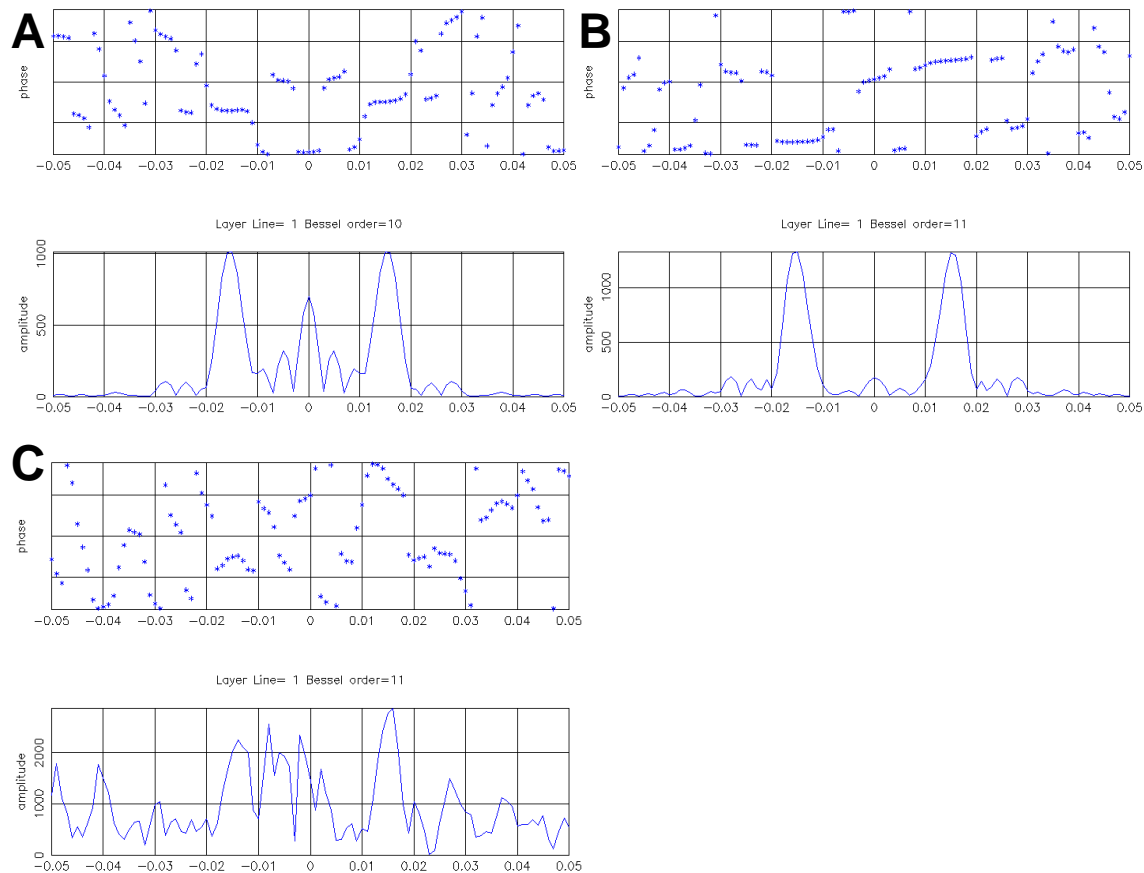


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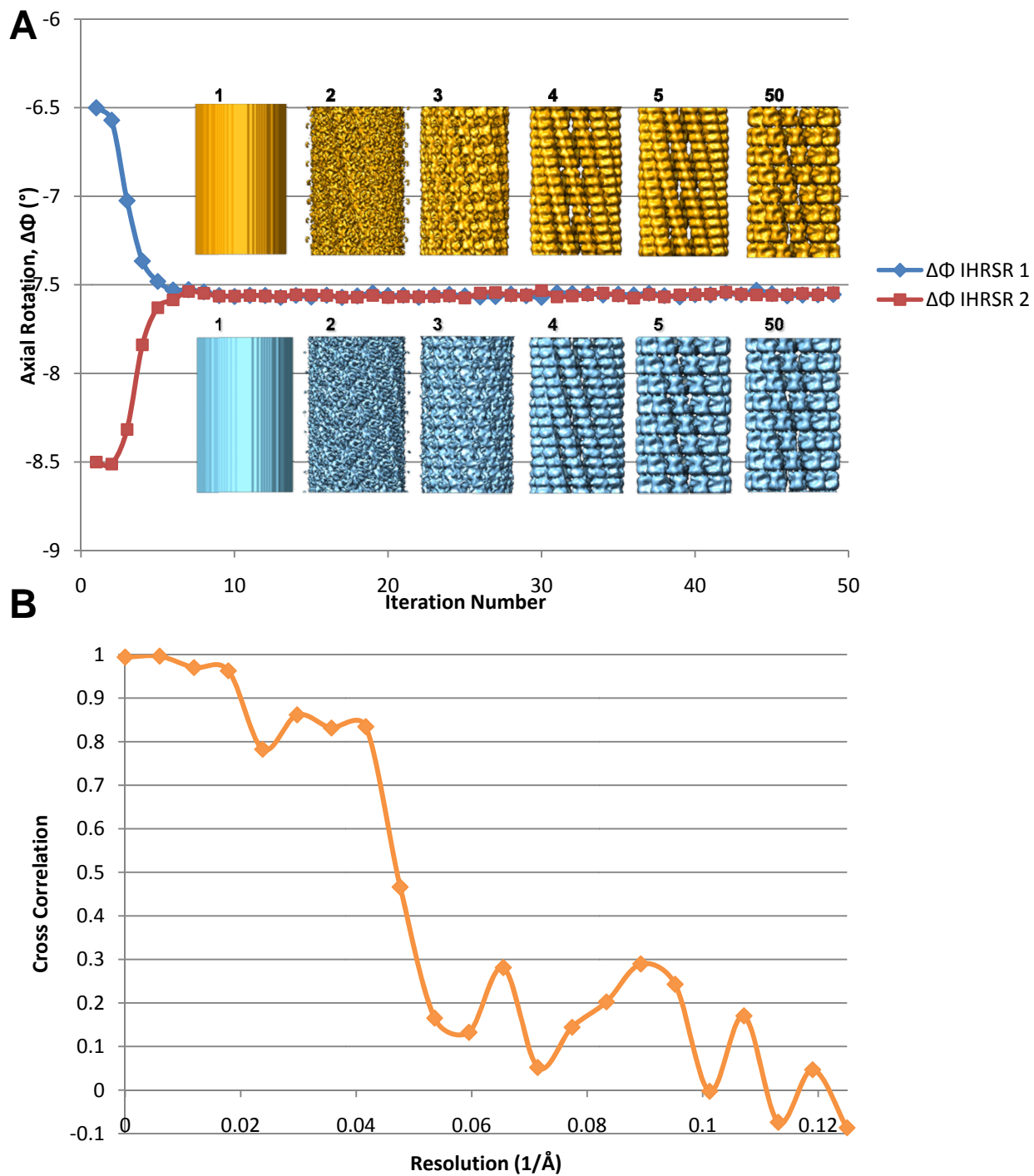
Supporting Material

Histone Octamer Helical Tubes Suggest that an Internucleosomal 4-Helix Bundle Stabilizes the Chromatin Fiber

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Supplementary Figure 1. Amplitudes and phases of an extracted $l = 4$ layer line (at $1/280 \text{ \AA}^{-1}$) from the Fourier transform of single images. (A) For a projection of a D_{10} model helix wherein phases are even for the maxima. (B) For a projection of a D_{11} model helix. Amplitudes are still identical the D_{10} model, yet the phases for the maxima now differ by 180° . (C) For a single large image of an individual fiber. Here the phases for the maxima clearly differ by close to 180° , and indicates the fiber has D_{11} symmetry like that of (B).



Supplementary Figure 2. (A) Convergence of the helical parameters between two reconstructions initiated from blank cylinder reference models and different initial guesses of the axial rotation values, namely -6.5° and -8.5° . (B) Fourier shell correlation between two independently generated reconstructions which falls to a correlation of 0.5 at 20 Å.