Three-dimensional fluorophore orientation imaging with polarized multiview microscopy

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Abstract: We show that polarized fluorescence microscopes make band-limited measurements in the angular frequency domain. We use this result to propose and demonstrate efficient algorithms for reconstructing three-dimensional fluorophore orientations from polarized multiview microscope data.

OCIS codes: 180.2520 Fluorescence microscopy, 260.5430 Polarization

1. Introduction

2. Theory

[1] [2]

3. Results

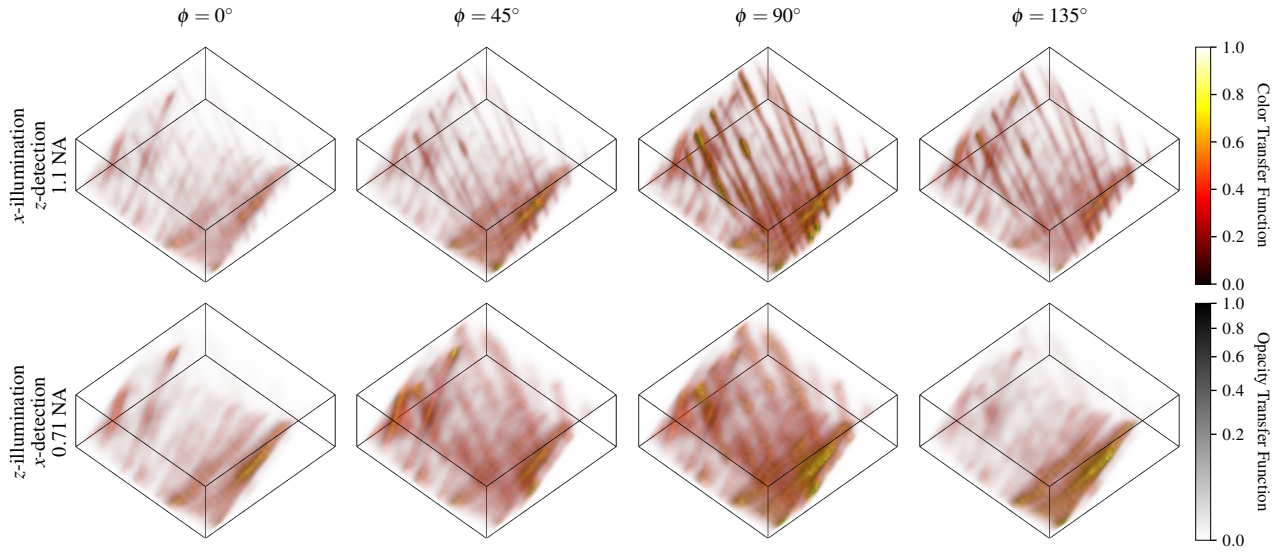

Fig. 1. Data.

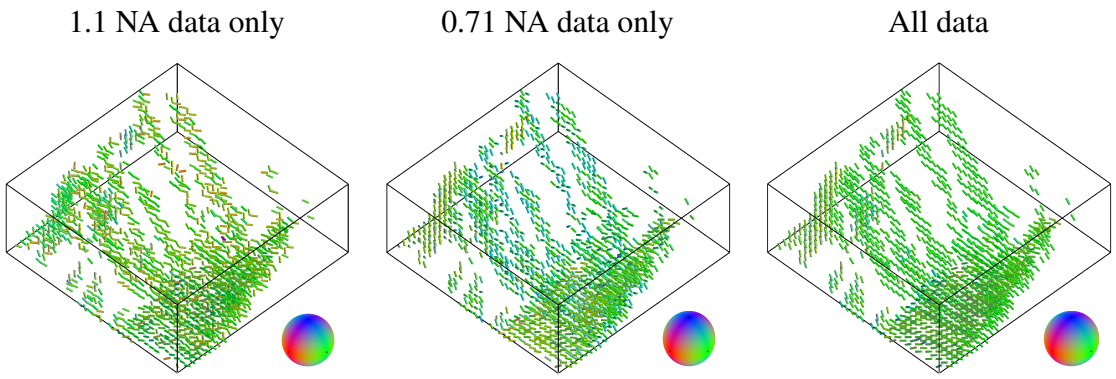

Fig. 2. Reconstruction.

References

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