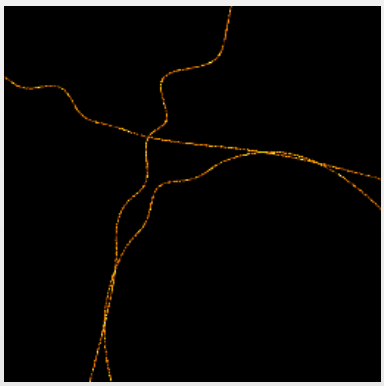
Single-Molecule Localization Microscopy • Software Benchmarking

Data • MT0.N1.LD



Experimental conditions

- Structure: MT0, 3 microtubules in the field of view of 6.4 x 6.4 x 1.5 µm
- Sequence: 19'996 frames
- Modality: 2D, 3D-Astigmatism, 3D-Double-Helix, 3D-Biplane
- Noise N1: typical photon counts and background levels for Alexa647 labelled STORM sample
- Molecule density: 0.2

Download

Type	Modality	Link to Download	Format	Size
Sequence	2D	MT0.N1.LD-2D-Exp-as-list	ZIP, n TIFF images	121 Mb
Sequence	2D	MT0.N1.LD-2D-Exp-as-stack	ZIP, 1 TIFF stack of n images	115 Mb
Sequence	3D-Astigmatism	MT0.N1.LD-AS-Exp-as-list	ZIP, n TIFF images	121 Mb
Sequence	3D-Astigmatism	MT0.N1.LD-AS-Exp-as-stack	ZIP, 1 TIFF stack of n images	115 Mb
Sequence	3D-Biplane (1 plane)	MT0.N1.LD-BP+250-as-list	ZIP, n TIFF images	121 Mb
Sequence	3D-Biplane (1 plane)	MT0.N1.LD-BP+250-as-stack	ZIP, 1 TIFF stack of n images	114 Mb
Sequence	3D-Biplane (1 plane)	MT0.N1.LD-BP-250-as-list	ZIP, n TIFF images	121 Mb
Sequence	3D-Biplane (1 plane)	MT0.N1.LD-BP-250-as-stack	ZIP, 1 TIFF stack of n images	114 Mb
Sequence	3D-Biplane	MT0.N1.LD-BP-Exp-as-list	ZIP, n TIFF images	235 Mb
Sequence	3D-Biplane	MT0.N1.LD-BP-Exp-as-stack	ZIP, 1 TIFF stack of n images	229 Mb
Sequence	3D-Double-Helix	MT0.N1.LD-DH-Exp-as-list	ZIP, n TIFF images	122 Mb
Sequence	3D-Double-Helix	MT0.N1.LD-DH-Exp-as-stack	ZIP, 1 TIFF stack of n images	116 Mb

Parameters

Camera		
Photon converter factor or Quantum efficiency (QE)	0.90	e^-/Ph.
Resolution	64	pixels
Pixelsize	100.00	nm
Field of view	6400.00	nm
Optics		
Wavelength	660.00	nm
Numerical aperture (NA)	1.49	
Autofluorescence		

Poisson Distribution		
Camera Noise		
Read-out: Gaussian distribution	74.4	
EMGain: Gamma	300.0	
Spurious noise: Poisson distribution	0.0020	
Analog Digital Conversion		
Total gain: QE*EM_gain/e_per_ADU	6.00	
Electron conversion e^- per ADU	45.00	e^-/DN
Baseline	100.00	DN
Saturation	65535.00	DN
Quantization	16-bit	
Computational Parameters		
Thickness	1500.00	nm
Frames	20000	
Multithreading	Off-1 Thread	
Pixelsize to PSF convolution	10.0	nm
Pixelsize for autofluorescence	100.0	nm
Pixelsize of the camera	100.0	nm
File format	TIFF 16-bits	

Last update: 19 Aug 2016