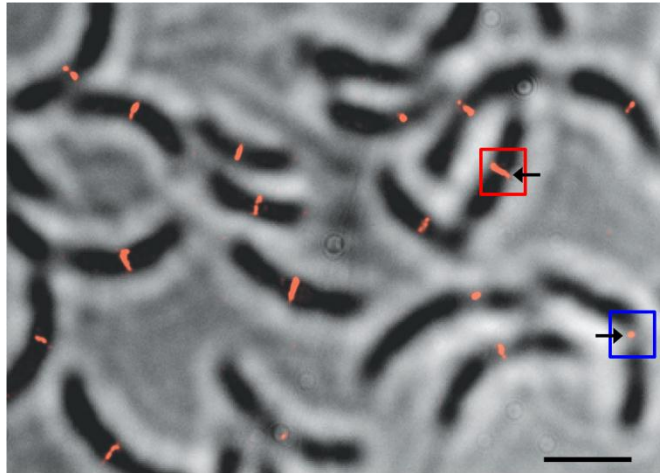


Three-dimensional superresolution imaging of the FtsZ midplane ring in *C. crescentus* using astigmatism



bar = 2 μ m, red: stalked, blue: prediv.

Orange in the image to the left is SR reconstruction superimposed on white light reverse contrast cells.

With 15 ms frame times, polymerized SM's are favored over cytoplasmic. Sampling of the dynamic structure in live cells was compared to fixed cells as a control.

Typical total sampling time: 15 s.

Imaged single molecules in red (561 nm pump), when more fluors are needed, use brief 407 nm to activate.

3D information acquired using astigmatism (Holtzer, Huang)

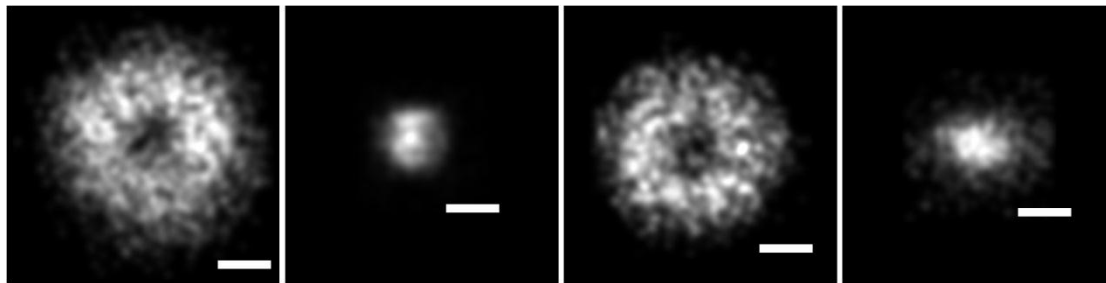
Construct is Dendra2-FtsZ, chromosomal, xylose-inducible

Live stalked

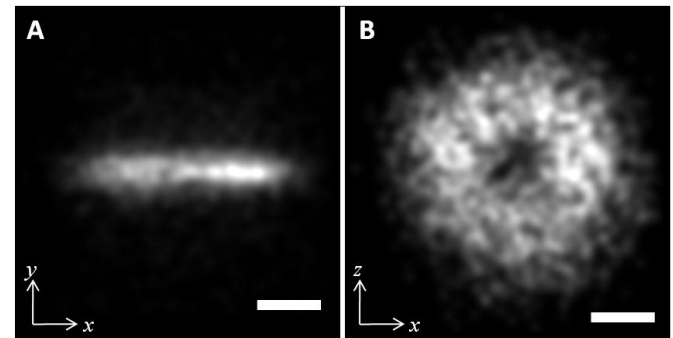
Live prediv.

Fixed stalked

Fixed prediv.



bar = 200 nm, localization precision \sim 30 nm



Side (xy) view

End-on (zx)