RO notes on experimental data in this folder: '/Users/rudolfo/Software/GitHub/BirTomo/data/2025\_04/SpiculeA Experim&Simulation/Experimental Data'

The volume data were prepared using the Mathematica Notebooks BirefrObjectForwardProjFeb2025.nb and BirefrObjectForwardProjApril2025.nb

Copied from Notes in the above Mathematica Notebook:

Using the light field data in folder SMS\_2024\_0611\_1248\_1, I created the retardance stack SMS\_2024\_0611\_1248\_1\_RetStack.tif that was further processed. The resolution along the Z-axis was increased from 6.75µm to 5µm, making the resolution isotropic. Some black Z-slices were added at top and bottom, bringing the overall dimensions {Z, Y, X} to {43, 128,128}. Furthermore, to reduce the measured retardance values to voxels that represent the spicule but not the tissue surrounding the spicule, the retardance data was thresholded by setting all retardance values below 8nm to zero. Finally, the stack of retardance data was converted to 8 bit and the resultant volume data are stored in SMS1248RetStackRectScaledThresh.tif. Further details can be gleaned from NotesOnImageData.docx residing with the original experimental data in /Users/rudolfo/LightFieldMicroscopy/Experiments/2024\_06\_11\_SUSpicule

The TIFF stack SMS1248RetStackRectScaledThresh.tif was used to create the HDF5 volume files in the