





3D Reconstruction of Nerve Fibers in the Human, the Monkey and the Rodent Brain

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3D-Polarized Light Imaging (3D-PLI) is a neuroimaging

technique that has opened up new avenues to study the complex architecture of nerve fibers in post mortem brains.

- This technique allows reconstructing three-dimensional pathways of nerve fibers with a resolution of a few micrometers by means of birefringence measurements of the brain tissue.
- In this project we analyze the birefringence measurements (images) of thousands of unstained histological brain sections obtained from different species (human, monkey, rodents).
- The computations are completely data driven and depend on the number and size of sections scanned at a few microns resolution.





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