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Loosely coupled level sets for simultaneous 3D retinal layer segmentation in optical coherence tomography

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**Highlights**

- A segmentation method that operates on OCT-derived attenuation coefficient data
- A probabilistic framework combining image data and prior knowledge about the retina
- Simultaneous segmentation of layers via weakly coupled level sets
- Weak coupling exploiting the predefined order of the layers and thickness priors
- Evaluation on various types of data (scan area, glaucoma, two OCT instrument)

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