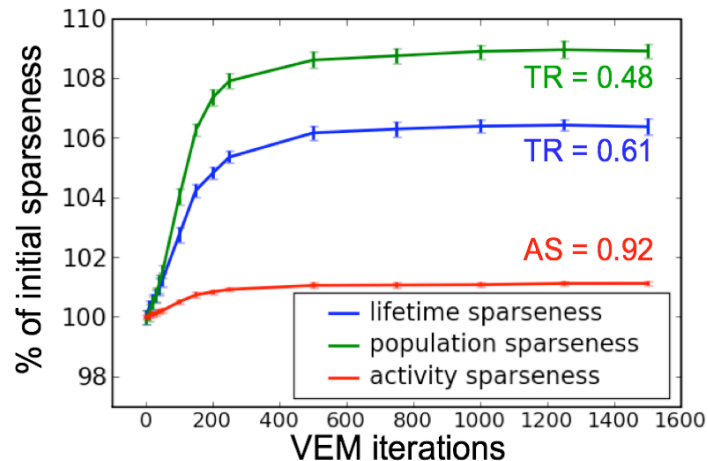


No evidence for active sparsification in the visual cortex

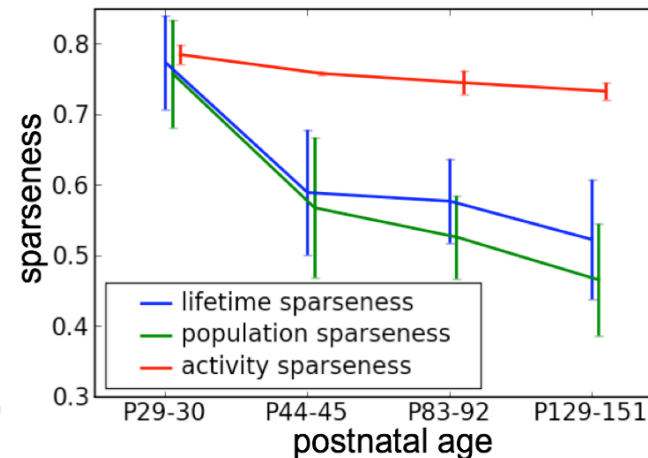
Pietro Berkes, Benjamin L. White, József Fiser - Brandeis University

Does neural activity over development and under different levels of anesthesia reflect a process of active sparsification of the neural code?

Theoretical prediction:
increase in sparseness
over learning



Neural data:
decrease in sparseness
over development



Neural data shows a trend *opposite* to the one expected in a sparse coding system, suggesting that the visual system is not actively optimizing the sparseness of its representation.