

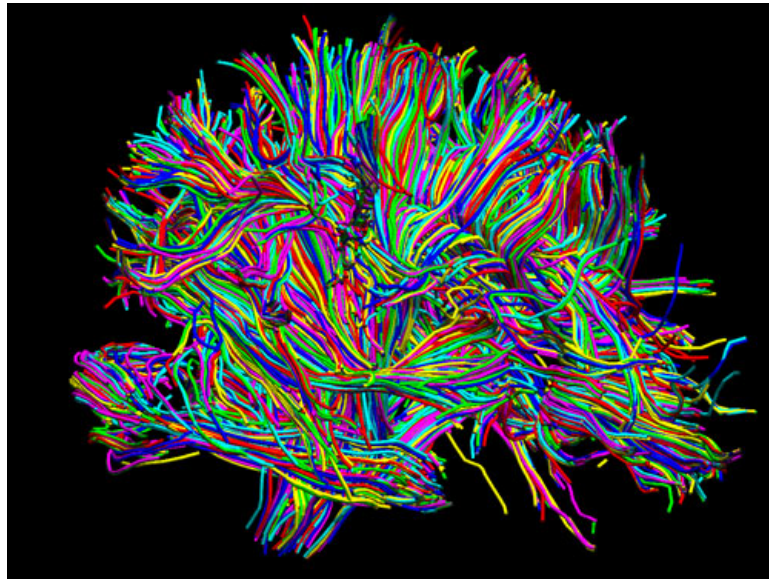
REDWOOD CENTER
for Theoretical Neuroscience



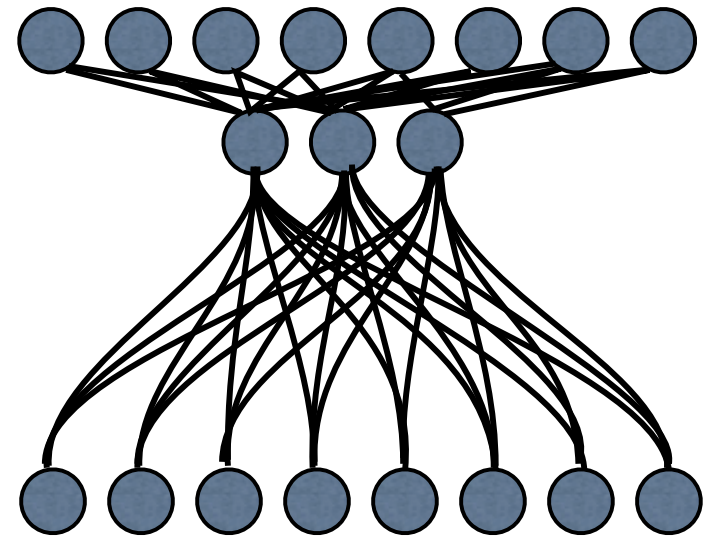
Adaptive Compressive Sampling

Guy Isely, Christopher J. Hillar, Fritz T. Sommer

How is information communicated across fiber tracts in the brain?



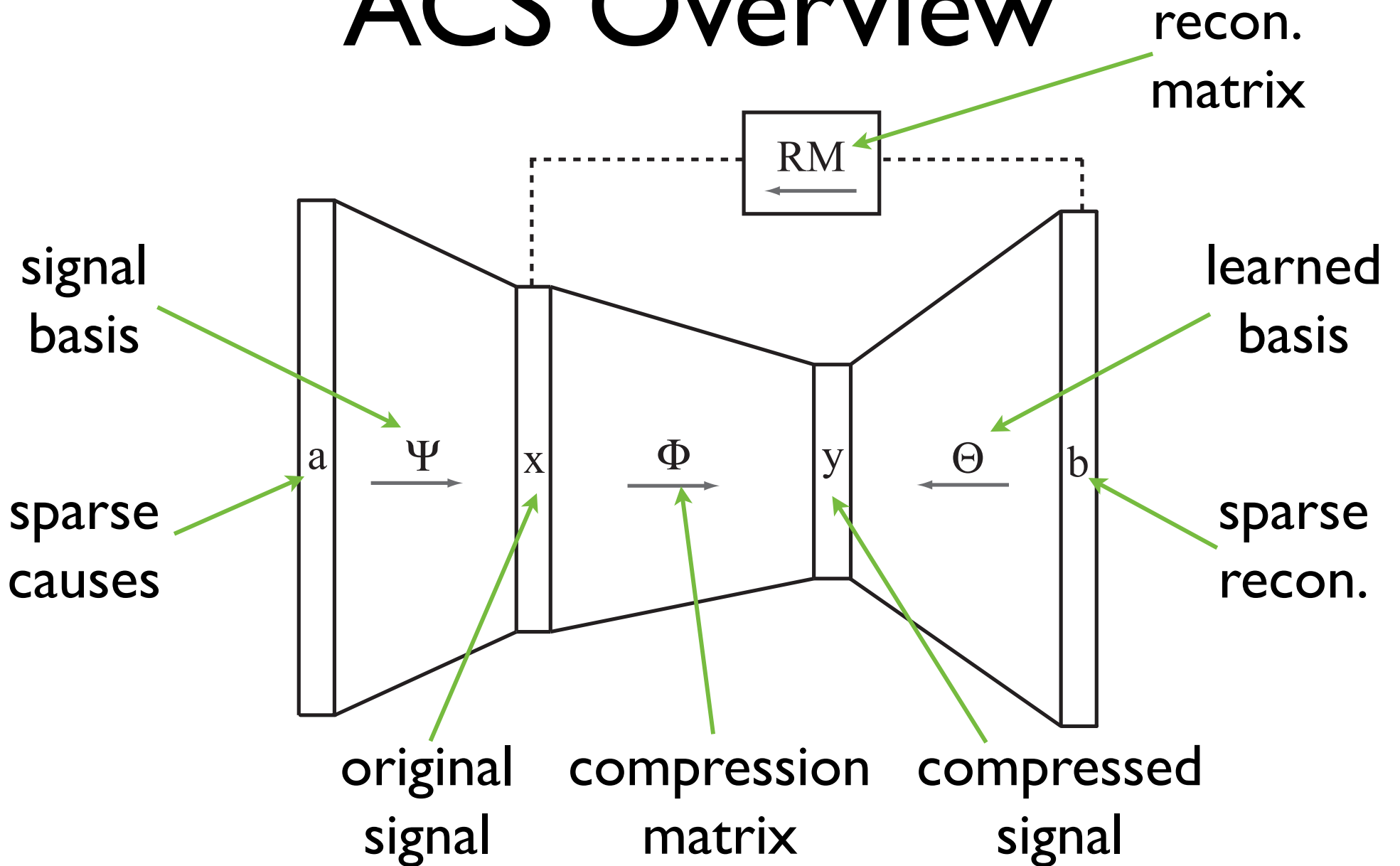
(Laboratory of Neuro Imaging, UCLA)



ACS scheme:

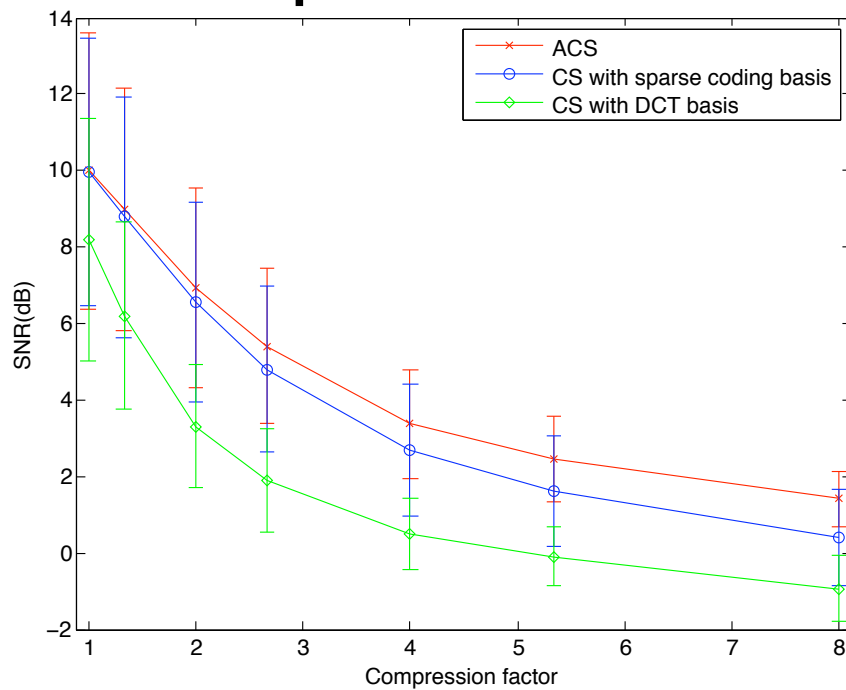
- a) Send (randomly) subsampled patterns through axons
- b) Recover full patterns using representational learning

ACS Overview



ACS Learning Results

Reconstructions
comparable to CS



Learned receptive fields
resemble those of simple cells

