



Figure 1: Efficient coding model architecture. Natural images (plus input noise σ_{in}) are multiplied by linear filters across multiple channels. These channels represent either cone inputs (Aim 1) or latencies (Aim 2). The output is perturbed by noise σ_{out} and rectified by a non-linear function, resulting in firing rate r_j for model neuron j . The weights of the filters are optimized to maximize the mutual information between the natural images and the firing rates across all neurons.