

Data: YouTube clips, down-sampled to 3x32x32 and sub-sampled in time to 12fps (0.5 seconds between frames).

Experiment: L_2 pooling in groups of four across features only (no spatial pooling). Constant individual L_1 penalty in all experiments while increasing the slowness penalty. Clearly, slowness does have an effect in the organization of the groups.

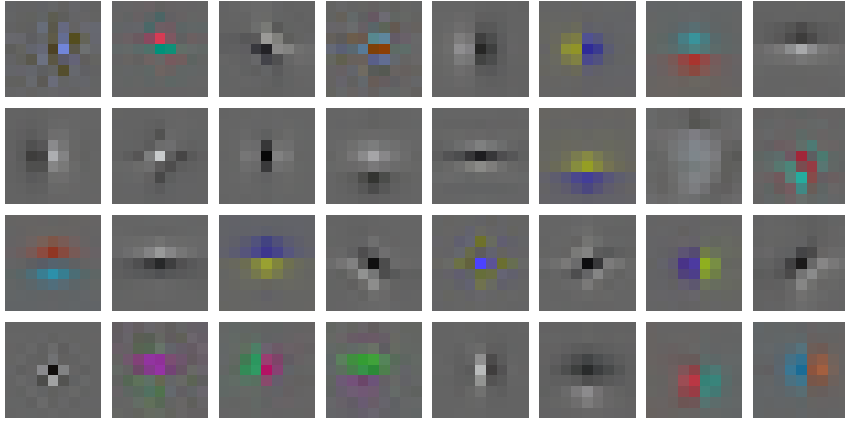


Figure 1: *Slowness weight = 0.1*

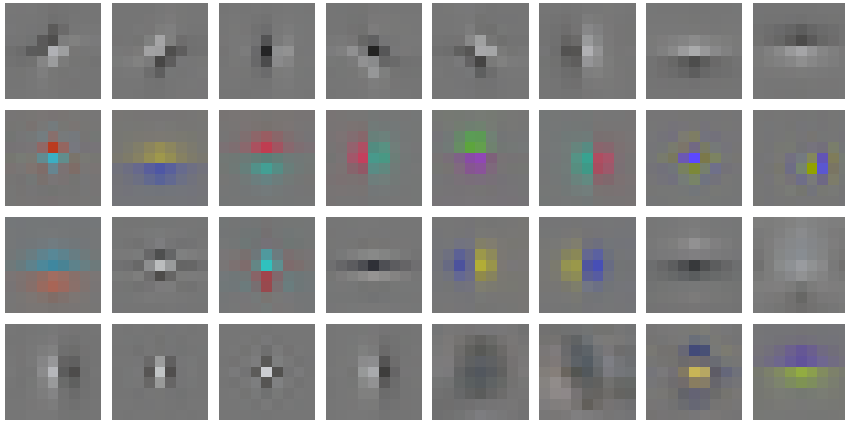


Figure 2: *Slowness weight = 0.2*

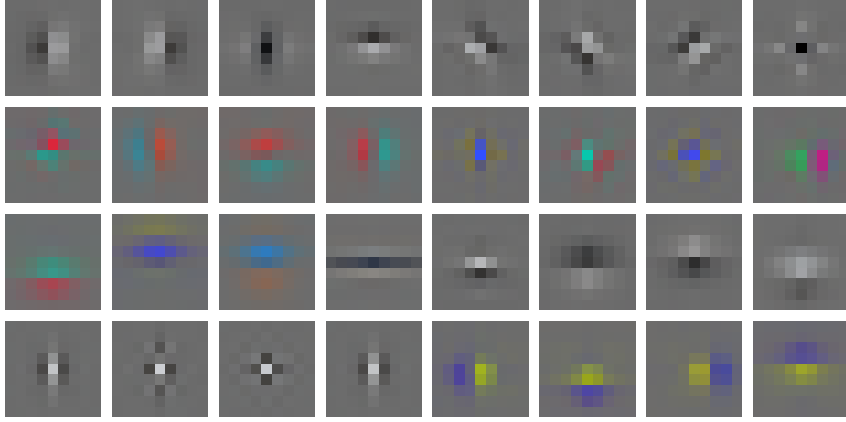


Figure 3: *Slowness weight = 0.5*

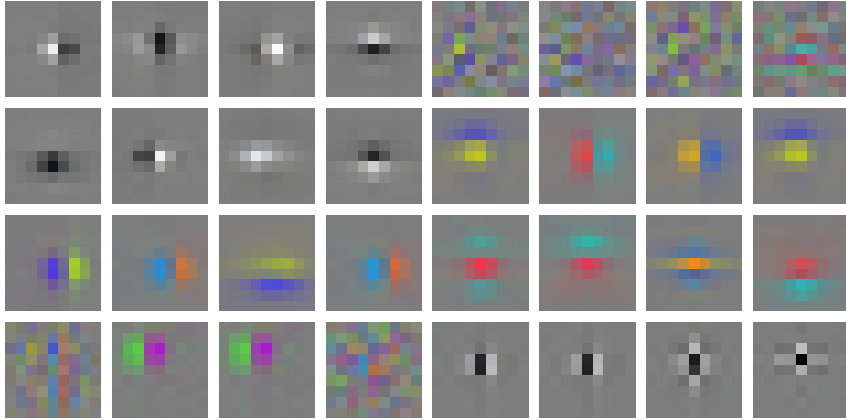


Figure 4: *Slowness weight = 1*

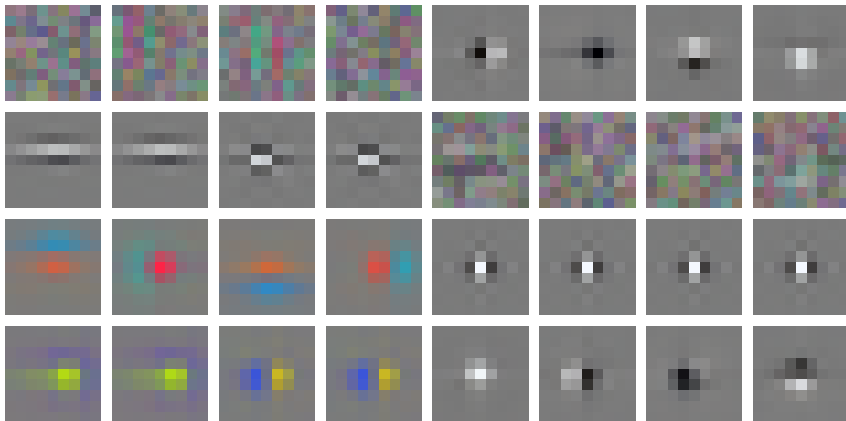


Figure 5: *Slowness weight = 2*

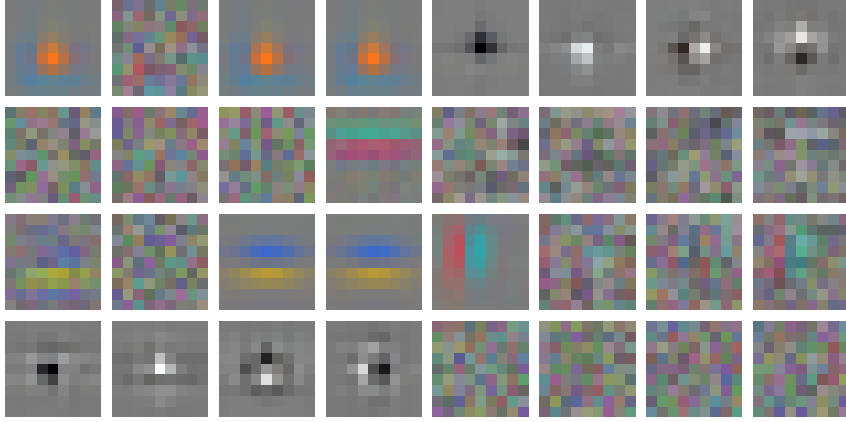


Figure 6: *Slowness weight* = 4

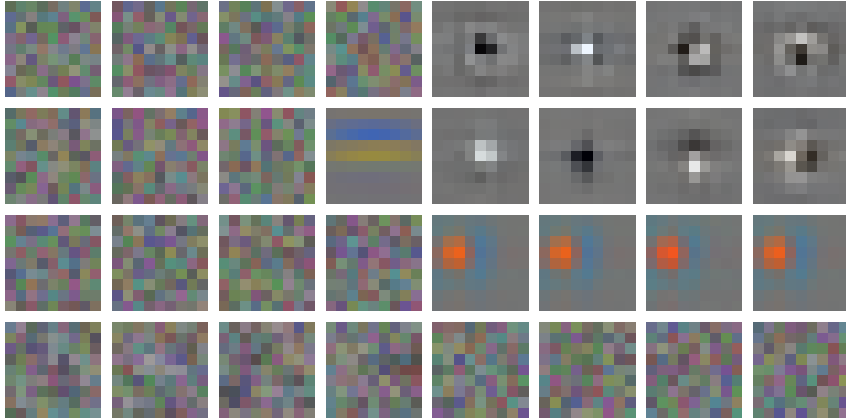


Figure 7: *Slowness weight* = 5

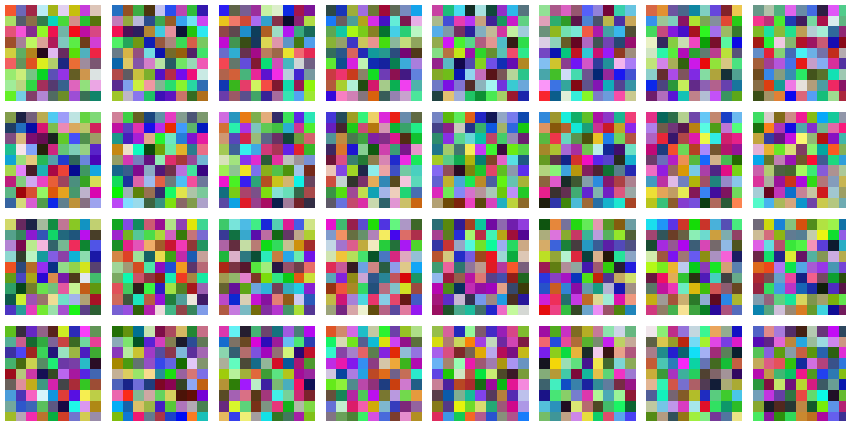


Figure 8: *Slowness weight* = 10