

## Neural Computation Workshop: Population Coding of High-Level Representations

### Wednesday, 17 August

6:00 - 10:00 Welcome reception at Dartmouth Outing Club  
(North end of Occom Pond)

### Thursday, 18 August

8:30 Coffee, pastries, fruit

9:00 - 9:10 Haxby Welcome and introductory comments

9:10 - 10:10 Simoncelli Metamers of the ventral stream

10:10 - 10:30 coffee break

10:30 - 11:30 Connor Neural coding of object structure in the ventral visual pathway

11:30 - 12:30 Poggio The computational magic of the ventral stream:  
Towards a theory

12:30 - 2:00 lunch in Occom Commons and  
posters in Moore Hall 2<sup>nd</sup> floor lounge

2:00 - 3:00 Cadieu Learning intermediate-level representations of form and motion  
from natural movies

3:00 - 3:30 coffee break

3:30 - 4:30 DiCarlo Untangling object recognition: Which neuronal population  
codes can explain human object recognition performance

### Friday, 19 August

8:30 Coffee, pastries, fruit

9:00 - 10:00 Haxby Building common models of neural representational spaces

10:00 - 10:30 coffee break

10:30 - 11:30 O'Toole Understanding neural representation of facial identity, race, and  
viewpoint: Constraining the neural with the perceptual

11:30 - 12:30 Gallant Using voxel-wise encoding models to discover brain  
representations and to decode brain activity

12:30 - 1:30 lunch in Occom Commons

1:30 - 2:30 Kriegeskorte Representational similarity analysis of visual object  
population codes

2:30 - 3:30 Mitchell What neural activity encodes about stimuli, where and when

3:30 - 4:00 coffee break

4:00 - ? general discussion

6:30 dinner at Haxby/Gobbini home (3 North Balch St)