

# Crash course Geometric Gauge theory of vision

November, 13 – 30, 2015

EHESS – CAMS

Avenue de France 90, Paris

**Alberto Romagnoni**  
Collège de France

Scope of the course is to provide instruments of geometric gauge theory for vision. Indeed the different areas of the visual cortex can be modeled as Lie groups with a subriemannian geometry. A model based on Gauge theory can describe the different invariant properties of different areas, and their interactions.

The course is organized in 30 hours, with lessons and laboratory hours, with the following detailed calendar:

November 13, 2015: 10.00-12.00 theory – lesson 1  
November 13, 2015: 14.00-17.00 laboratory – part 1

November 16, 2015: 10.00-12.00 theory lesson 2  
November 16, 2015: 14.00-17.00 laboratory – part 2

November 18, 2015: 10.00-12.00 theory lesson 3  
November 18, 2015: 14.00-17.00 laboratory –part 3

November 23, 2015: 10.00-12.00 theory lesson 3  
November 25, 2015: 14.00-17.00 laboratory – part 4

November 25, 2015: 10.00-12.00 theory lesson 3  
November 25, 2015: 14.00-17.00 laboratory – part 5

November 30, 2015: 10.00-12.00 theory lesson 6  
November 30, 2015: 14.00-17.00 laboratory – part 6

