

#### UNIVERSITY OF VERONA

### DEPARTMENT OF NEUROLOGICAL, NEUROPSYCHOLOGICAL, MORPHOLOGICAL AND MOTOR SCIENCES

Section of Physiology and Psychology

PhD SCHOOL "SCIENCE ENGINEERING MEDICINE"
PhD Program in PSYCHOLOGICAL AND PSYCHIATRIC SCIENCES
PhD Program in NEUROSCIENCE



#### ASSOCIAZIONE PER LE NEUROSCIENZE "GIUSEPPE MORUZZI"

# Seminars in PSYCHOLOGICAL and PSYCHIATRIC SCIENCES and NEUROSCIENCE

Friday, July 6, 2012 at 11:30 a.m. Room "F" – Istituti Biologici

Diane M. Beck, PhD

Associate Professor Department of Psychology Beckman Institute University of Illinois

Title of the Seminar

## "Decoding Natural Scenes"

Abstract: Human beings are surprisingly adept at extracting the gist from natural scenes, even with extremely brief exposures. How does the brain so quickly categorize such complex and cluttered stimuli? We use both behavioral methods and fMRI pattern analysis to address this question. Specifically, using statistical learning techniques borrowed from computer science, we have been able to decode scene category throughout visual cortex, including primary visual cortex and the parahippcampal place area (PPA). Moreover, across a range of experiments we have found that decoding, particularly in later visual areas, mirrors human behavior. These data not only provide insight into the brain regions involved in natural scene categorization but also the features critical to our ability to categorize the scenes

Everyone is welcome to attend

\_\_\_\_\_\_

For further information please contact Prof. Carlo Alberto Marzi e-mail: carloalberto.marzi@univr.it