

# Pattern Recognition of Brain Signals

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## **Pattern Recognition of Brain Signals**

1. The information contained in patterns is greater than the one contained in their average.
2. Data driven techniques allow exploring the data free of models and generating new hypothesis.
3. Cooperation is widely spread throughout nature and also among brain areas.
4. Classification even if crude allows for simple selection and reduction of noise.
5. The search for information is often long and exhausting, this also applies to searching brain regions informative with respect to discrimination of stimuli.
6. Invariance allows generalization and is an efficient coding mechanism.
7. The combination of multiple sources of information is the best way to have an unbiased representation of reality.
- 8 . As far as the laws of mathematic refer to reality, they are not certain; and as far as they are certain, they do not refer to reality (A. Einstein).
9. Crude classifications and false generalizations are the curse of organized life (H.G. Wells).
10. The future challenge is to study the cooperation of brain areas across people.

Federico De Martino  
Maastricht, 30 September 2008