

IM2-AffSci

Workshop 1

Multimodality in emotions and for their assessment
Thierry Pun – Didier Grandjean

About 20 people, half of each background

Content:

- Theoretical constructs in emotional processes
- Peripheral and central measures in emotional processes
- Expressive multimodality
- Olfactory-elicited emotion assessment via peripheral signals
- Flow phenomenon and emotions in games: peripheral measures
- Gestures and coding body movements
- Thermography and facial expressions
- Emotions and tracking interest during movie watching (multimedia + peripheral measures)

Common interests and divergences

Common definition of what is “Multimodality” in emotions

IM2 oriented to applications (with sometimes shortcuts in theoretical constructs) VS AffSci oriented to theoretical development and empirical experiments designed to test operationalized hypotheses;

Differences between what « affsci people » hope « IM2 people » can extract, and what we can actually do;

Some homework is needed: e.g. for "technical people" to get acquainted with theories, such as CPM, and for "psy people" to understand a bit the methods and their limits.

Synchronization is a key question for both NCCRs:

- in the emotion generation of multimodal signals (emotion encoding)
- in the signal that can be recorded
- in the multimodal analysis (emotion decoding), which leads to the issue of **fusion** (data fusion, classifier fusion)

EEG techniques and analysis (even for different purposes)

- Same techniques are used: e.g. time frequency analysis on single trials
- Measures of EEG synchronization

« Cross-fertilization »

for technical questions and methods for IM2toAffSci and for theoretical and methodological questions (designs) for AffScitoIM2

Existing collaborations between Thierry's team and AffSci

- EEG assessment in emotional processes
- Odors and emotion