

## **Going deeply into EMDR mechanism of action : hypotheses and experimental evidences**

Neuroimaging has been shown to be a powerful tool to investigate EMDR neurobiological correlates demonstrating a clear association between normalization of brain functional changes and symptoms regression. In the recent past, a series of EEG investigations monitoring in real time the cortical activations occurring during bilateral ocular desensitization made of EMDR the first psychotherapy in which neurobiological correlates have been depicted in real time. Thanks to these powerful tools, the presentation will review various neurophysiologically-based hypotheses about EMDR mechanism of action with special focus on the role of bilateral stimulation and memory networks. New experimental evidence will be reported.