Detection of ERP using Matching Pursuit algorithm

This article deals with application of matching pursuit algorithm for ERP processing. In matching pursuit method, the given signal can be approximated or represented as a superposition of waveforms that belong to redundant dictionary of functions. The waveforms are selected in order to best match the signal structure. This method can be successfully used for detection of the averaged ERP waves. Alternatively, the algorithm can be also used for detection of evoked response in non-averaged signal with aim to minimize ERP detection time.

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