Conclusions

- An associative learning task was performed by schizophrenia patients and healthy controls, patients performed worse.

- Several connectivity models of the BOLD signal generation were defined by DCM and fitted to measurement.

- The information processing networks implemented by patients proved to be fundamentally different than the controls'.

- Impairment in the prefronto-hippocampal and hippocampo-inferiotemporal pathways, which play an important role in the cognitive control of associative memory formation.

- The connection strengths are positively correlated with learning performance.

- The method is able to differentiate natural slow learning and illness.