







differentiated from the healthy subjects.

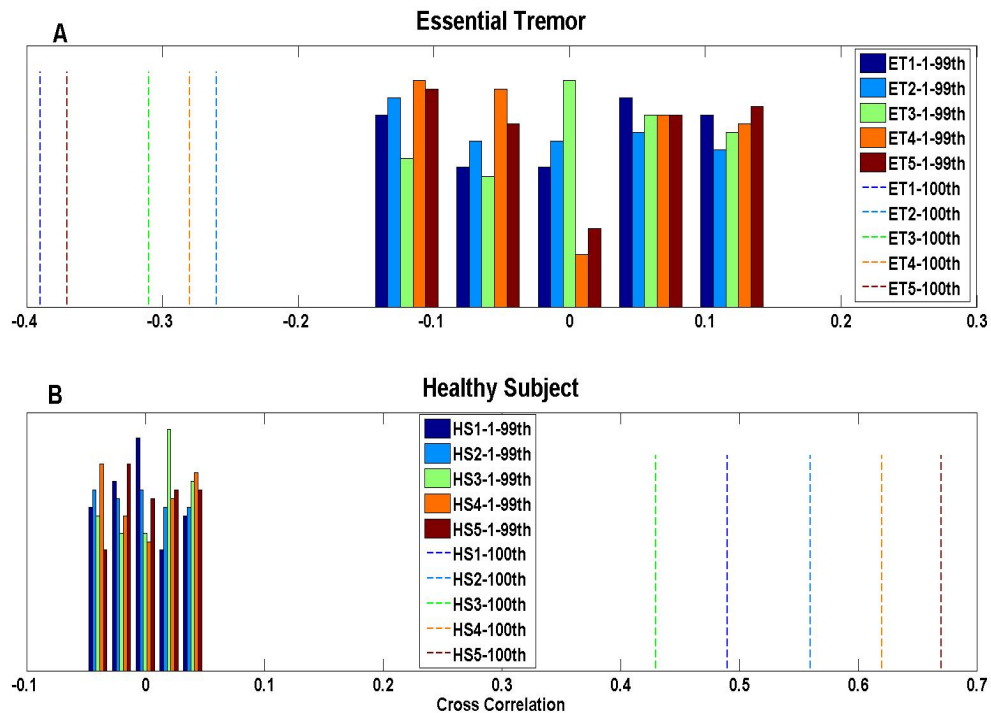


Fig 2. A Cross correlation of the 5 essential tremor patients. B. Cross correlation of the 5 healthy subjects.

### Acknowledgement

Support from the German Research Council (Deutsche Forschungsgemeinschaft, DFG, SFB 855, Project D2) is gratefully acknowledged.

### References

- [1] Sapir N, Karasik R, Havlin S, Simon E, Jeffrey MH. Detecting scaling in the period dynamics of multimodal signals: Application to Parkinsonian tremor. *Physical Review E* 2003;67:01-08
- [2] Mitra PP, Pesaran B. Analysis of dynamic brain imaging data, *Biophysical Journal* 1999;76:691-708.
- [3] Slepian D, Pollak HO. Prolate spheroidal wave functions Fourier analysis and uncertainty, I. *Bell Sys. Tech. Journal* 1961;40:43-63
- [4] Halliday D, Rosenberg JR, Amjad AM, Breeze P, Conway BA, Farmer SF. A framework for the analysis of mixed time series point process data-theory and application to study of physiological tremor, single motor unit discharges and electromyogram. *Prog.Biophys Mol. Bio*, 1995; 64: 237–238.
- [5] Amjad D, Halliday DM, Rosenberg JR, Conway B. An extended difference of coherence test for computing and combining several independent coherence estimates: theory and application to the study of motor units and physiological tremor, *Journal of Neuroscience Methods* 1997;73:69-79.