

CURRICULUM VITAE

LAURENCE CASINI

ASSOCIATE PROFESSOR

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PERSONAL INFORMATION

Date of birth: December 9, 1967

Place of birth : Villeneuve-les-Avignon, France

Citizenship : French

Languages : French (mother tongue), English

Marital status : married, 2 children

EDUCATION

- 1994 : PhD (Neuroscience), Université de la Méditerranée, Marseille, France

- 1991 : Master Sciences (Neuroscience), Université de la Méditerranée, Marseille, France

- 1989 : Bachelor Sciences (Neuroscience), Université de la Méditerranée, Marseille, France

SCIENTIFIC POSITIONS

- since November 1998 : Associate Professor, Aix-Marseille Université, Marseille, France

- 1996 - 1998 : Assistant Professor, Université de Provence, Marseille, France

- 1994 - 1996 : Post-doctoral Research Fellow, Department of Psychology, University of California, Berkeley, USA

- 1991 - 1994 : PhD student and teaching assistant, CNRS, Université de la Méditerranée, Marseille, France

RESEARCH INTERESTS

- Neural bases of explicit and implicit temporal processing.

- Relationships between attention and executive control

Behavioral studies, EEG studies, TDCS studies, patients with lesions or neurodegenerative pathologies, children with developmental disorders (dyslexia and ADHD)

TEACHING ACTIVITIES

Neurophysiology, Psychophysiology and cognitive neuroscience to Bachelor and Master degrees in Neuroscience or Psychology.

PUBLICATIONS

1. **Casini, L.** et Macar, F. (1993) Behavioural and electrophysiological evidence for a specific processing of temporal information, *Psychologica Belgica*, 33, 285-296.

2. Macar, F., Grondin, S. et **Casini, L.** (1994). Controlled attention-sharing influences time estimation, *Memory and Cognition*, 22, 3, 673-686.

3. Maquet, P., Lejeune, H., Pouthas, V., Bonnet, M., **Casini, L.**, Macar, F., Timsit-Berthier, M., Vidal, F., Ferrara, A., Degueldre, C., Quaglia, L., Delfiore, G., Luxen, A., Woods, R., Mazziotta, J.C., Comar, D. (1996). Brain activation induced by estimation of duration. A PET study. *NeuroImage*, 3, 119-126.
4. **Casini, L.** et Macar, F. (1996). Prefrontal slow potentials in temporal compared to nontemporal tasks. *Journal of Psychophysiology*, 10, 252-264.
5. **Casini, L.** et Macar, F. (1996). Can the level of brain activity provide an index of the temporal performance? *Neuroscience Letters*, 219, 71-74.]
6. **Casini, L.** et Macar, F. (1997). Effect of attention manipulation on judgments of duration and of intensity in the visual modality. *Memory and Cognition*, 25,6, 812-819.
7. Lejeune, H., Maquet, P., V., Bonnet, M., **Casini, L.**, Ferrara, A., Macar, F., Pouthas, V., Timsit-Berthier, M. et Vidal, F. (1997). The basic pattern of activation in motor and sensory temporal tasks: positron emission tomography data. *Neuroscience Letters*, 235, 21-24.
8. **Casini, L.** et Ivry, R. (1999) Effects of divided attention on temporal processing in patients with lesions of the cerebellum or frontal lobes, *Neuropsychology*, 13, 1, 10-21.
9. Macar, F., Vidal, et **Casini, L.** (1999) Performance-dependent ERP changes in judgments of brief durations, *Experimental Brain Research*, 125, 271-280.
10. **Casini, L.** et Macar, F. (1999) Multiple approaches to evidence the existence of an internal temporal processor, *Behavioural Processes*, 45(1-3), 73-85.
11. **Casini, L.**, Macar, F. et Giard, M.H. (1999) Relation between the level of prefrontal activity and subject's performance: A comparison between a timing and a semantic task, *Journal of Psychophysiology*, 13, 117-125.
12. Burle, B. & **Casini, L.** (2001) Dissociation between activation and attention effects in time estimation: implications for internal clock models, *Journal of Experimental Psychology: Human Perception and Performance*, 27, 195-205.
13. Romaiiguère, P., Anton, J.L., Roth, M., **Casini, L.** et Roll, J.P. (2003) Motor and parietal cortical areas both underlie kinesthesia, *Cognitive Brain Research*, 16, 74-82.
14. **Casini, L.**, Romaiiguère, P., Ducorps, A., Schwartz, D., Anton, J.L., et Roll, J.P. (2006) Cortical correlates of illusory hand movement perception in humans : a MEG study, *Brain Research*, 1121 (1), 200-206.
15. **Casini, L.**, Roll, J.P. et Romaiiguère P. (2008). Relationship between the velocity of illusory hand movement and strength of MEG signals in human primary motor cortex and left angular gyrus, *Experimental Brain Research*, 186(2), 349-353.
16. **Casini, L.**, Burle, B. et Nguyen, N. (2009). Speech perception engages a general timer: Evidence from a divided attention word identification task, *Cognition*, 112, 318-322.

17. **Casini, L.** & Vidal, F. (2011). The SMAs: neural substrate of the temporal accumulator?, *Frontiers in Integrative Neuroscience*, 5-35, doi: 10.3389/fnint.2011.00035 .
18. **Casini, L.**, Beauvir, C., Burle, B., & Vidal, F. (2013). How does one night of sleep deprivation affect the internal clock ? *Neuropsychologia*, 51 (2), 275-283.
19. Suarez, I., Lopera, F., Pineda, D., & **Casini, L.** (2013). The cognitive structure of time estimation impairments in adults with ADHD. *Cognitive Neuropsychology*, 30(4), 295-307
20. Rochet, N., Spieser, L., **Casini, L.**, Hasbroucq, T. & Burle, B. (2014). Detecting and correcting partial-errors: evidence for efficient control without conscious access to (partial) mistakes. *Cognitive, Affective, and Behavioral Neuroscience*, 14 (3), 970-982.]
21. Suarez, I., Vidal, F., Burle, B., & **Casini, L.** (2015). A dual-task paradigm to study the Interference reduction in the Simon task. *Experimental Psychology*, 62 (2), 75-88.
22. Burle, B., Spieser, L., Roger, C., **Casini, L.**, Hasbroucq, T., & Vidal, F. (2015) Spatial and temporal resolution of EEG: is it really black and white? A Scalp Current Density view. *International Journal of Psychophysiology*, 97(3), 210-220.
23. Vidal, F., Carbonel, L., Spieser, L., Hasbroucq, T., **Casini, L.**, Burle, B. (2015) *International Journal of Psychophysiology* , 97(3), 221-232.
24. Suarez, I., Burle, B., Tobon, C., Pineda, D., Lopera, F., Hasbroucq, T., & **Casini, L.** (2015) Deciphering interference control in patients with ADHD by using distribution analyses and electromyographic activity. *Acta Psychologica*, 159, 85-92.
25. Dyson, M., Eoin T., **Casini, L.** & Burle, B. (2015). An Analysis of Regions Contributing to Error Detection in Motor Imagery BCIs. *NeuroImage*, 121, 146-158.
26. Millot, J.L., Laurent, L., **Casini, L.** (2016). The influence of odors on time perception. *Frontiers in Psychology*, 7:181.
27. Davranche, K., **Casini, L.**, Arnal, P., Rupp, T., Perrey, S., Verges, S. (2016). Cognitive functions and cerebral oxygenation changes during acute and prolonged hypoxic exposure at a constant high-altitude. *Physiology and Behavior*, 164, 189-197.
28. **Casini, L.**, Pech-Georgel, C., Ziegler, J. (2018). It's about time: Revisiting temporal processing deficits in dyslexia. *Developmental Science*, 00:e12530. doi: 10.1111/desc.12530.]
29. Pomportes, L., Brisswalter, J., **Casini, L.**, Hays, A., Davranche, K. (2018). Cognitive performance enhancement induced by caffeine, carbohydrate and guarana mouth rinsing during submaximal exercise. *Nutrient*, in press

CHAPTER IN BOOKS AND PROCEEDINGS

1. **Casini, L.**, Macar, F. and Grondin, S. (1992). Time estimation and attentional sharing. In Macar, F., Pouthas, V. and Friedman, W. (Eds). *Time, Action and Cognition*, Kluwer Academic Publishers,

Dordrecht.

2. Macar, F. et **Casini, L.** (1996). Mechanisms involved while processing brief durations. In E. Pessa, M.P. Penna et A. Montesanto (Eds): Third European Congress on Systems Science. Rome: Edizioni Kappa, 869-872.

3. **Casini, L.** et Macar, F. (1996). Effets de l'attention automatique et contrôlée sur l'estimation de la durée d'un stimulus visuel. In F. Anceaux et J.M. Coquery (Eds.). Sciences Cognitives, Individus et Sociétés, Lille, 181-186.

4. Macar, F. et **Casini, L.** (1998). Brain correlates of time processing. In V. De Keyser, G. d'Ydewalle et A. Vandierendonck (Eds): Time and the dynamic control of behavior. Göttingen : Hogrefe & Huber Publishers, 71-82.

5. Macar, F. & **Casini, L.** (2002) Timing performance: Evaluating the differential contribution of cerebral structures. General Psychology 2 : Temporal dynamics and cognitive processes. Roma: Edizioni Scientifiche Magi, 115-130.

6. Dyson, M., Roger, C., **Casini, L.**, & Burle, B. (2011). About to Fail! Detecting Subliminal Errors: a New Tool for BCI?. *Proceedings of the 5th Int. Workshop on Brain-Computer Interfaces*, 232-235.

7. Spinnato, J., Roubaud, M.C., **Casini, L.**, Burle, B., & Torrèsani, B. (2012) Une approche modèle mixte pour la classification supervisée de signaux électrophysiologiques. *Proceedings of 44ème Journée de Statistiques*.

8. Dyson, M., **Casini, L.**, & Burle, B. (2012). Discrimination of discrete feedback during performance of motor imagery. *Proceedings of the 2nd International Workshop on Pattern Recognition in NeuroImaging*.

9. van Rijn; H., Kononowicz, T., Vidal, F., **Casini, L.**, Wiener, M., Penney, T., Kei Ng, K. (2014). The Role of the SMA and the Contingent Negative Variation in Interval Timing. *Procedia Social and Behavioral Sciences*, 126, 27-28.

10. Dyson, M., Maby, E., **Casini, L.**, Perrin, M., Mattout, J., Burle, B. (2014). Training Free Error-Potential Detection. *Proceedings of the 5th Int. Workshop on Brain-Computer Interfaces*, sous presse.

FRENCH PUBLICATIONS

1. **Casini, L.** (1997). La perception du temps. *Cognito ergo Scribo*, 2, 8-14.

2. **Casini, L.** & Macar, F. (1997). Corrélat électrophysiologique des processus d'estimation temporelle. *Temporalistes*, 36, 9-14.

3. Pouthas, V., **Casini, L.** & Vidal, F. (2010). Une horloge dans le cerveau. *Pour la Science*, 397, 116-122.

4. **Casini, L.** (2010). Pourquoi avons-nous des réactions somatiques telles que rougir, les mains

moites, ou encore les larmes aux yeux ? In *François-Xavier Alario (Ed.): Toutes les questions que vous vous posez sur votre cerveau. Paris : Odile Jacob Sciences.*