# Claire Braboszcz

Cognitive Neurosciences

32 years old
French citizenship

\$\\$\pi\\$+44 (0)79079 11 964

\times claire.braboszcz@plymouth.ac.uk



# Current project - Marie Sklodwska-Curie Research Fellow

Laboratory School of Psychology, University of Plymouth, UK

Thematic EEG time-frequency characteristics and decoding of mental imagery

Supervisor Pr. Giorgio Ganis

Keywords electroencephalographie, brain decoding, mental imagery, introspection, first-person data, attention, oscillations, psychometry

## Education

- 2013-2015 **Research fellow**, fMRI study of the hypnotic state and empathy to pain, Laboratory for Behavioral Neurology and Imaging of Cognition, University of Geneva, Geneva, Switzerland, Collaboration with Pr. Patrik Vuilleumier.
- 2008–2012 **PhD in Cognitive Neurosciences**, The electroencephalographic correlates of mind wandering and meditation, Center for Brain and Cognition Research, Toulouse, France, Supervised by Dr Arnaud Delorme, PhD.
- 2007–2008 M.S degree 2nd year in 'Neuroscience, Behavior and Cognition', University of Toulouse 3 Paul Sabatier, Toulouse, France, With Honors.
- 2006–2007 M.S degree 1st year in Cognitive Sciences, University Lumiere Lyon 2, Lyon, France, Exchange student at the University of British Columbia (UBC), Vancouver, Canada.

  With Honors
- 2003–2006 **B.A in Cognitive Sciences**, *University Lumiere Lyon* 2, Lyon, France, With Honors.

Breaks in career 3 periods of maternity leave for a total of about 16 months between 2011 and 2016

## Grants and Fundings

- 2015 2 years research fellowship, Individual Marie Sklodowska-Curie European research grant.
- 2013 2 years research fellowship, Marie-Curie BRIDGE Co-fund and Fyssen Foundation.
- 2012 End of PhD fellowship, Foundation for Medical Research (FRM).
- 2011 **3 months fellowship**, German office for academic exchange.
- 2008 3 years PhD scholarship, French National Research Center (BDI, CNRS).

# International Experience

- 2015– United Kingdom, University of Plymouth, post-doctoral collaboration.
- 2013-2015 Switzerland, University of Geneva, post-doctoral collaboration.
  - 2011 Germany 2 months, Max Planck Institute for Psychiatry, Munich, collaboration on a combined EEG/fMRI study.

- 2009–2010 India 7 months, Meditation Research Institute, Rishikesh, EEG data recording.
  - 2009 USA 2 months, Swartz Center for Computational Neuroscience, San Diego, EEG signal advanced analysis.

## Publications and Communications

- Braboszcz, Claire and Brandao-Farinelli Edith and Vuilleumier Patrik
   Hypnotic analgesia reduces brain responses to pain seen in others
   Scientific Report 2017
- $\circ$  Braboszcz, Claire

Pratiques mentales: vers une convergece stque de la mtation, de l'hypnose et de l'imagerie mentale

Intellectica 2017

 Braboszcz, Claire and Cahn, B. Rael and Levi, Yoni and Fernandez, Manuel and Delorme, Arnaud

Increased gamma brainwave amplitude compared to control in three different meditation traditions

Plos One 2017

- Grandchamp, Romain and Braboszcz, Claire and Delorme, Arnaud Oculometric variations during mind wandering Frontiers in Psychology 2014.
- o **Braboszcz, Claire** and Cahn, B. Rael and Balakrishnan, Bhavani and Maturi, Raj K. and Grandchamp, Romain and Delorme, Arnaud

Plasticity of visual attention in Isha yoga meditation practitioners before and after a 3-month retreat

Frontiers in Psychology 2013.

• Braboszcz, C. and Delorme, A.

Lost in thoughts: neural markers of low alertness during mind wandering  $Neuroimage\ 2011.$ 

## International peer-reviewed conference article

- Lemaignan, Séverin and Fink, Julia and Braboszcz, Claire and Dillenbourg, Pierre The Cognitive Correlates of Anthropomorphism
   2014 Human-Robot Interaction Conference, Workshop" HRI: a bridge between Robotics and Neuroscience" 2014.
- Grandchamp, Romain and Braboszcz, Claire and Makeig, Scott and Delorme, Arnaud

Stability of ICA decomposition across within-subject EEG datasets Engineering in Medicine and Biology Society (EMBC), 2012 Annual International Conference of the IEEE 2012.

o Grandchamp, R. and **Braboszcz, C.** and Hupé, J.M. and Delorme, A. **Pupil dilation and blink rate increase during mind-wandering** 34th European Conference on Vision Processing, Perception 40 2011.

#### Book chapters

 Braboszcz, C. and Hahusseau, S. and Delorme, A.
 Meditation and Neuroscience: from basic research to clinical practice in: Handbook of Integrative Clinical Psychology, Psychiatry, and Behavioral Medicine: Perspectives, Practices, and Research 2010.

#### Dissertation

 Braboszcz, Claire
 Study of the electroencephalographic correlates of mind wandering and meditation
 2012.

#### Communication

- Braboszcz, Claire and Brandao-Farinelli Edith and Vuilleumier Patrik Influence
  of hypnotic analgesia on the perception of pain seen in others, 10th Alpine
  Brain Imaging Meeting, 2015, Champery, Switzerland
- Braboszcz, Claire and Cahn, B. Rael and Levi, Yoni and Fernandez, Manuel and Delorme, Arnaud Increased gamma brainwave amplitude compared to control in three different meditation traditions, Mind and Life 1st European Symposium, 2013, Berlin, Germany
- Braboszcz, Claire and Cahn, B. Rael and Levi, Yoni and Fernandez, Manuel and Delorme, Arnaud Increased gamma brainwave amplitude compared to control in three different meditation traditions, BACI Conference 2013, Geneva
- Braboszcz, Claire and Cahn, B. Rael and Balakrishnan, Bavani and Grandchamp Romain and Delorme, Arnaud Is meditation improving attention? A study on 82 Isha meditation practitioner following a 3 months retreat, poster presentation, ECVP 2011, Toulouse, France
- Grandchamp, Romain and Braboszcz, Claire and Hupe, Jean-Michel, and Delorme, Arnaud Pupil dilatation during mind wandering, poster presentation, ECVP 2011, Toulouse, France
- Braboszcz, Claire and Delorme, Arnaud. Lost in Toughts: Neural markers of low alertness level during mind-wandering, poster presentation, ICCNS 2009, Boston University, Boston

# Teaching Experience and Student Supervision

#### Student Supervision

- 2013-2015 Maria Shyriaeva, Master in Neuroscience, The EEG correlates and phenomenology of mind wandering in the hypnotic state, University of Geneva, Switzerland.
  - 2011 Birgit Ramsauer and Corina Storz, Medicine students, EEG theta activity in mind wandering and memorization, Max Planck Institute for Psychiatry and LMU, Munich, Germany.

#### Teaching

- 2016 **Invited Lecture**, *University of Plymouth*, *United Kingdom*. Introduction to brain-computer interaction
- 2014 **Main Lecturer**, *University of Geneva*, *Switzerland*, 1 day. EEGlab toolbox workshop, 12 participants
- 2013 **Main Lecturer**, *Linkoping University*, *Linkoping*, *Sweden*, 3 days. EEGlab toolbox workshop, 15 participants
- 2012 **Lecturer**, *ISAE-Supaero*, *Toulouse*, *France*, 5 hours. Introduction to EEG, lecture and neurofeedback tutorial
- 2010 and 2011 Lecturer and helper at EEGlab Workshops , France and Finland, 4 days. EEGlab toolbox tutoring, 50 participants
  - 2010 Main lecturer for HBM Educational Course: the EEGlab toolbox, Human Brain Mapping, Barcelona, Spain.
  - 2008–2010 **Lecturer**, School of Psychomotricity, Toulouse, France, 41 hours, 35 students. Physiology module

# Technical Skills

Development

Scientific Analysis and MNE-Python, Matlab, EEGlab,

Neuroimaging ing and signal processing

R, SPM8, Psychopy, Psychtool-

expert in EEG and fMRI record-

Operative Systems Linux

Office tools LateX, JabRef, Inkscape, Git

## Additional Information

#### Scientific outreach activities

- 2016 Public engagement and educational activity "What is EEG?" within the University of Plymouth, .
- 2013-2015 Diverse collaborations with Communication and Knowledge transfer service of the Center for Affective Science (University of Geneva), .
- President of Toulouse Cognitive Science Student Association (InCOGnu), 2008-2010 Team management, creation of animations to popularize Cognitive Sciences towards a large audience.
- French National Cognitive Science Student Federation (FRESCO), involved 2005-2010 at diverse degrees (treasurer, executive comittee member).

#### Additional Training

- 2016 Consciousness, from theorie to practice, Neuroscience School of Advanced Studies, Bressanone, Italy, 8 days summer school.
- 2013 SPM8 Workshop, Zurich, Switzerland, 4 days.
- june 2009 EEGlab Workshop for advanced EEG analysis, Aspet, France, 3 days.
- 2008-2011 Training 'interviews for collection of first-person data', Paris, France, 40 hours.

## Scientific expert for

-International Journal of Psychophysiology, Journal of Cognitive Neuroscience, Brain and Cognition, Frontiers in Human Neuroscience, EMC Psychiatry, Constructivist Foundations

## Languages

French Native

English Expert

Spanish Novice