## PERSONAL INFORMATION

Family name, First name: Mamassian, Pascal

Researcher unique identifier (ResearcherID): F-4781-2012

Date of birth: 31 December 1965

Nationality: France

URL for web site: https://lsp.dec.ens.fr/en/member/647/pascal-mamassian

#### **EDUCATION**

Habilitation (2005) Psychology, Université Paris 5, France

Ph.D. (1995) Psychology, University of Minnesota, Minneapolis, USA M.A. (1990) Cognitive Sciences, EHESS and Université Paris VI, France B.Sc. (1989) Electrical Engineering, Sup Télécom (ENST), Paris, France

## **CURRENT POSITIONS**

2014-present: CNRS Research Director (DR2 / DR1), CNRS & Ecole Normale Supérieure, Paris, France (promoted DR1 in 2016)

2014-present: Founding Director of the "Laboratoire des Systèmes Perceptifs" (UMR 8248), CNRS & Ecole Normale Supérieure, Paris, France

#### **PREVIOUS POSITIONS**

2004-2014: CNRS Research Scientist (CR1 / DR2), CNRS & Université Paris Descartes,

France (promoted DR2 in 2007)

1997-2004: Lecturer / Senior Lecturer, Psychology Department, University of Glasgow, UK

(promoted Senior Lecturer in 2002)

1994-1997: Post-doctoral fellow, Psychology Department, New York University, USA 1993-1994: R.A., Max-Planck Institute for Biological Cybernetics, Tübingen, Germany

1990-1993: Ph.D. candidate, Psychology Department, University of Minnesota, USA

# FELLOWSHIPS AND AWARDS

2018: Anneliese Maier Award, Alexander von Humboldt Foundation, Germany

2016: "Perception Lecture", European Conference on Visual Perception, Barcelona,

Spain

2004: Chaire of Excellence from the Ministry of Research, France

#### RECENT RESEARCH INTERESTS

In the past, my main research interest has been to apply the tools of Bayesian inference to visual perception. Amongst the most exciting results we obtained recently are: (1) the dynamics of multisensory perception can be well accounted for using race models but only if noise is added at the decision stage (Otto & Mamassian, 2012, *Current Biology*); (2) prior knowledge in vision, such that light comes from above our head, is engaged in the early stages of visual processing (Gerardin et al., 2010, *PNAS*); (3) perceptual biases, such as the ones observed in motion perception, are idiosyncratic to each individual and have a very slow dynamics of days or weeks (Wexler et al., 2015, *PNAS*); (4) the visual system can implicitly monitor the statistics of the environment over several minutes to recalibrate itself (Chopin & Mamassian, 2012, *Current Biology*), (5) perceptual and motor decisions rely on different statistics of visual motion (Simoncini et al., 2012, *Nature Neuroscience*), (6) humans monitor their own performance to stop the accumulation of sensory evidence (Balsdon et al., 2020, *Nature Communications*), and (7) the perceived time of an event is always affected by other events in temporal proximity (Jovanovic & Mamassian, 2020, *Psychonomic Bulletin & Review*).

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2004-present: 10 post-docs (4 are now faculty members in the UK, Denmark, Hong Kong, and

France)

13 PhD students (3 are now faculty members in the USA and France)

CNRS & Ecole Normale Supérieure, Paris, France

1997-2004: 3 post-docs (all now faculty members in the UK and Canada)

5 PhD students (2 are now faculty members in the UK) Psychology Department, University of Glasgow, UK

# **TEACHING ACTIVITIES**

2006-present: Member of the Teaching Board of the Master of Cognitive Sciences ("Cogmaster"),

administered by Université Paris Descartes, EHESS & Ecole Normale Supérieure; Member of the Scientific Board of the Cogmaster; Co-ordinator (2006 – 2014) of the "Psychology" strand of the Cogmaster (responsible to recruit and advise about 12 students a year).

# ORGANISATION OF SCIENTIFIC MEETINGS

- Co-organizer (with David Simmons) of the European Conference on Visual Perception, ECVP, in Glasgow. ECVP is the largest European annual meeting in my field (about 600 presentations that year)
- 2007 2012 Member of Board of Directors of the Vision Sciences Society that organizes the largest annual meeting in my field, VSS, in Florida, USA (about 2,000 presentations every year). President of the Society in 2010-2011.

# COMMISSIONS OF TRUST (selection)

- 2006 now Editorial Board, Journal of Vision (ISI impact factor: 2.34); Senior Editor 2018-2022
- 2006 now Editorial Board, L'Année Psychologique (ISI impact factor: 0.28)
- 2007 2016 Editorial Board, *Psychological Science* (ISI impact factor: 4.94)
- 2009 now Editorial Board, *Perception* (ISI impact factor: 1.11); Editor-in-chief since 2023
- 2009 now Editorial Board, *i-Perception* (ISI impact factor: 1.81); Editor-in-chief since 2023
- 2011 2016 Editorial Board, *PLoS ONE* (ISI impact factor: 3.06)
- 2015 2022 Editorial Board, Psychological Review (ISI impact factor: 7.58)
- 2008 2016 Elected member of the French National Science Committee in Integrative Neuroscience (CNRS Section 27, then 26). This committee recruits, evaluates, and promotes half of all CNRS researchers in neuroscience in France (about 325 full-time researchers).

#### RECENT REPRESENTATIVE PUBLICATIONS

Total number of full research articles: 109 in peer-reviewed journals (1<sup>st</sup> author = 19; senior author = 62). My h-index (ISI / Web-of-Science; August 2023) is 34 (ResearcherID: F-4781-2012).

- Mamassian, P., & de Gardelle, V. (2022). Modeling perceptual confidence and the confidence forced-choice paradigm. *Psychological Review*. *129*(5), 976–998.
- Jovanovic, L., & Mamassian, P. (2020). Events are perceived earlier in peripheral vision. *Current Biology*, 30(21), R1299–R1300.
- Balsdon, T., Wyart, V., & Mamassian, P. (2020). Confidence controls perceptual evidence accumulation. *Nature Communications*, *11*(1), 1753–11.
- Gekas, N., Meso, A.I., Masson, G.S., & Mamassian, P. (2017). A normalization mechanism for estimating visual motion across speeds and scales. *Current Biology*, *27*(10), 1514-1520.
- Mamassian, P. (2016). Visual confidence. Annual Review of Vision Science, 2, 459-481.
- Wexler, M., Duyck, M., and Mamassian, P. (2015). Persistent states in vision break universality and time invariance. *Proceedings of the National Academy of Sciences USA, 112(48)*, 14990-14995.
- de Gardelle, V., and Mamassian, P. (2014). Does confidence use a common currency across two visual tasks? *Psychological Science*, *25*(6), 1286-1288.
- Simoncini, C., Perrinet, L. U., Montagnini, A., Mamassian\*, P. and Masson\*, G. S. (2012). More is not always better: adaptive gain control explains dissociation between perception and action. *Nature Neuroscience*, *15*, 1596-1603. (\*): joint corresponding authors.
- Otto, T. and Mamassian, P. (2012). Noise and correlations in parallel perceptual decision making. *Current Biology*, 22, 1391-1396.
- Chopin, A. and Mamassian, P. (2012). Predictive properties of visual adaptation. *Current Biology*, 22, 622-626.

# **RECENT GRANTS**

- 2015-2019: "Perception and Action in Complex Environments", EC ITN, role: co-PI; LSP share: € 249,275.
- 2018-2022: "Visual Confidence", ANR, role: PI; LSP share: €373,520.
- 2020-2023: "Perceptual Grouping", NIH/ANR, role: PI; LSP share: €198,220.