

Robert Seymour

Aston University, Birmingham, UK / Macquarie University, Sydney, NSW

 robbyseymour@gmail.com |  [neurofractal](https://github.com/neurofractal) |  [Publications](#)

Education

2015 – Present

[Aston University](#)/[Macquarie University](#)

PhD in Neuroscience with Cotutelle Studentship

Project: MEG studies of atypical cortical activity in autism. Supervised by Prof. Klaus Kessler, Prof. Gina Rippon, A-Prof. Paul Sowman.

2014 – 2015

[University of York](#)

MSc Cognitive Neuroscience

Project: Spatiotemporal Dynamics of Retrieval Within and Between Semantic Categories ([abstract](#)). Supervised by Prof. Beth Jefferies & Dr. Jonathan Smallwood.

Grade: Distinction (Empirical Project: 89%; Overall Average: 84%) with Cognitive Neuroscience Project Prize 2015.

2010 – 2013

[Durham University](#)

BSc Joint Honours Degree in Biology & Psychology within the Natural Sciences degree programme

Grade: Upper Second Class (final year average: 69%)

Research Skills

- Programming Languages: **MATLAB, Python**, html
- Data Analysis: Expertise in oscillation-based functional connectivity
- Data Management: Maintaining lab MEG/MRI analysis code via [Github](#)
- Software Competencies: **Fieldtrip**, SPM, **FSL**, Freesurfer, HCP Workbench, Psychopy, ePrime, SPSS, JASP
- Open Science: BioRxiv, Figshare
- Data Collection: MEG scan operator (Elekta/Yokogawa); MRI scan operator (level 2)
- Reviewing Activities: Frontiers in Neuroscience

Publications

- Krieger-Redwood, K., Jefferies, E., Karapanagiotidis, T., **Seymour, R.**, Nunes, A., Ang, J. W. A., ... & Smallwood, J. (2016). Down but not out in posterior cingulate cortex: Deactivation yet functional coupling with prefrontal cortex during demanding semantic cognition. [NeuroImage, 141, 366-377](#).
- Kessler, K., **Seymour, R. A.**, & Rippon, G. (2016). Brain oscillations and connectivity in autism spectrum disorders (ASD): new approaches to methodology, measurement and modelling. [Neuroscience & Biobehavioral Reviews, 71, 601-620](#).
- Seymour, R. A.**, Rippon, G., & Kessler, K. (2017). The Detection of Phase Amplitude Coupling during Sensory Processing. [Frontiers in neuroscience, 11, 487](#).
- Seymour, R. A.**, Wang, H., Rippon, G., & Kessler, K. (2018). Oscillatory networks of high-level mental alignment: A perspective-taking MEG study. [NeuroImage, 177, 98-107](#).
- Seymour, R. A.**, Rippon, G., Gooding-Williams, G., Schoffelen, J. M., & Kessler, K. (2018). Dysregulated Oscillatory Connectivity in the Visual System in Autism Spectrum Disorder. [bioRxiv, 440586](#).

Major Conferences Presentations:

- Biomag 2016: Seoul, South Korea. *Poster presentation*.
- MEG UK, 2017: Oxford, UK. *Site Talk*.
- Australia Cognitive Neuroscience Society 2017: Adelaide, Aus. *Poster presentation*.
- International Society for Autism Research 2018: Rotterdam, NL. *Poster presentation*.
- Australia Cognitive Neuroscience Society 2018: Melbourne, Aus. *Fast Talk*.

Funding Awarded

- Cotutelle PhD scholarship awarded by Aston University, UK, & Macquarie University, Australia (including research costs, tuition fee and stipend)
- Macquarie University Postgraduate Research Fund with Award for Outstanding Application (Value: \$5500AUD)
- Is Visual Snow a Thalamo-Cortical Dysrhythmia of the visual processing system? - A magnetoencephalogram study (assistant investigator, Value: \$29,988AUD)

Teaching Experience

- Higher-level Teaching Assistant Cherwell School Oxford (Oct 2013-Sep 2014)
- Teaching Assistant for Cognitive Psychology 1a (Aston University, 2016)
- Co-convenor MEG CCD-KIT MEG Workshop, Dec 2017
- Co-convenor MEG CCD-KIT MEG Workshop, Nov 2018