CURRICULUM VITAE

PERSONAL INFORMATION

Name:	Fairhurst-Menuhin (nee Fairhurst), Merle Theresa
Email:	merle.fairhurst@tu-dresden.de
Marital status:	married (5 children)
Date of birth:	20.08.1982
Nationality:	German



EDUCATION

2008	Postgraduate	D.Phil <i>FMRIB Centre, University of Oxford, UK</i> Supervisor: Prof. Irene Tracey
2004	Undergraduate	BA(Hons)/MA Physiological Sciences University of Oxford, UK
2000	Diploma	Diploma The Juilliard School of Music, USA

Music Cognition & Action Research Group

CURRENT POSITION(S)

2022 – present J. Professor Social Affective Touch Center for the tactile internet with human in the loop (CeTI), TU Dresden, Germany

PREVIOUS POSITIONS

2019 – 2022	Professor for Biological Psychology (Vertretung/Temporary) Institute für Psychologie, Universität der Bundeswehr München, Germany
2017 – 2022	Assistant Professor Philosophy of Mind and Munich Center for Neurosciences, LMU Munich, Germany
2014 – 2017	Post-doctoral researcher Centre for the Study of the Senses, Institute of Philosophy, University of London, UK
2012 – 2014	Post-doctoral researcher Max Planck Institute for Human Cognitive Brain Sciences, Leipzig, Germany Early Social Development Research Group
2009 – 2012	Post-doctoral researcher Max Planck Institute for Human Cognitive Brain Sciences, Leipzig, Germany

TRACK RECORD

I am a multilingual researcher with vast international experience. I have published over 30 peer-reviewed journal articles and book chapters, with over 2000 citations, in high impact journals including Journal of Neuroscience, Psychological Science, Cerebral Cortex, Scientific Reports and Neuroimage. My work can be summarised as the application of psychophysical, physiological and neuroimaging techniques combined with novel computational modelling approaches to investigate socially rich, dynamically evolving multisensory events. Through strong interdisciplinary ties, my research pushes technological, computational and theoretical boundaries, working with computer scientists, engineers, mathematicians and philosophers.

HIGHLIGHTED PUBLICATIONS (*10 most relevant to proposed project for a full list, please see page 7)

Dunckley P., Wise R.G., **Fairhurst M.**, Hobden P., Aziz Q., Chang L., Tracey I. (2005) A comparison of visceral and somatic pain processing in the human brainstem using functional magnetic resonance imaging. *J Neurosci*

Fairhurst M., Wiech K., Dunckley P., Tracey I. (2007) Anticipatory brainstem activity predicts neural processing of pain in humans. *PAIN*

Fairhurst M.T., Fairhurst K, Berna Renella C, Tracey I.A. (2012) Simulated and physical pain produce overlapping brain networks of activity except for posterior insular cortex. *Plos One*

Fairhurst, M.T., Löken, L.S., Grossman, T. (2014) Physiological and behavioral responses reveal human infants' sensitivity to pleasant touch. *Psychological Science*

Gallotti, M., Fairhurst M. T., Frith, C. (2017) Alignment in social interactions. Consciousness and Cognition

Fairhurst M.T., Deroy O. (2017) Testing the shared spatial representation of magnitude of auditory and visual intensity. *J Exp Psychol Hum Percept Perform* 2017

Fairhurst M.T., Travers E, Hayward V, Deroy O. Confidence is higher in touch than in vision in cases of perceptual ambiguity. *Scientific Reports* 2018

Deroy, O., & **Fairhurst, M.** (2019). Spatial Certainty: Feeling is truth. In T. Cheng, O. Deroy, C. Spence (Eds.) *Spatial Senses: Philosophy of Perception in an Age of Science*. Routledge. https://doi.org/10.4324/9781315146935

Battich, L., Fairhurst, M., & Deroy, O. (2020). Coordinating attention requires coordinated senses. *Psychonomic Bulletin & Review*, 1-13.

Najm, A., Hadjipanayi, C., Michael-Grigoriou, D., Banakou, D., McGlone, F., & **Fairhurst, M.** (2022, October). The Virtual Touch Toolkit: An Interactive Media Mobile Application for Promoting Well-Being through Affective and Social Touch. In 2022 International Conference on Interactive Media, Smart Systems and Emerging Technologies (IMET) (pp. 1-4). IEEE.

Fairhurst, M. T., Tajadura-Jiménez, A., Keller, P. E., & Deroy, O. (2023). You, me, and us: Maintaining self-other distinction enhances coordination, agency, and affect. Iscience, 26(12).

Valori, I., Jung, M. M., & **Fairhurst, M. T.** (2023). Social touch to build trust: A systematic review of technology-mediated and unmediated interactions. Computers in Human Behavior, 108121.

PUBLICATION METRICS - Peer-reviewed publications: 30 - Books: 6 book chapters; / 2 books (forthcoming) - Invited talks and Conference presentations: 45	Cited by	All	VIEW ALL Since 2019	340
	Citations h-index i10-index	2376 20 23	1356 20 23	255 170 85 2017 2018 2019 2020 2021 2022 2023 2024 0
				Google Scholar (accessed 12.01.2024)

ORGANISATION OF SCIENTIFIC MEETINGS

- 2021 Organiser of e-Conference: socialBRIDGES *The near future of AI: How will humans and AI interact in 5 years?* (21-23 April 2021)
- 2020 Organiser of e-Conference: socialBRIDGES *Alignment in groups, networks and teams* (18-20 November, 2020)
- 2020 Organiser of e-conference: socialBRIDGES *Society, psychology and behaviour during and post COVID-19 lockdown* (22-24 July 2020)
- 2019 Organiser of Conference: *Alignment in body & mind: Investigating and quantifying alignment in dynamic social interactions in Munich* (6-8th May 2019)
- 2017 Organiser of Symposium: *Trusting Our Senses: Metacognition and Confidence Across Sensory Modalities.* ICPS 2017, Vienna 23-25th March 2017

REVIEWING ACTIVITIES

- 2023 present Guest Editor Computers in Human Behaviour
- 2023 present Guest Editor Frontiers Psychology special issue
- 2022 present Review Editor, Frontiers in Human Neuroscience Interacting Minds and Brain
- 2021 present Action Editor, Psychological Research
- 2020 2021 Guest Editor SCAN special issue
- 2020 2021 Guest Editor Frontiers Psychology special issue
- 2007 present Ad hoc Reviewer for Cerebral Cortex, Plos One, Journal of Neurophysiology, Consciousness & Cognition, Journal of Psychology, Neuroimage, Psychology & Neuroscience, Somatosensory & Motor Research, Behavioural Sciences, e-life, Developmental Cognitive Neuroscience, International Journal of Psychophysiology, Cognition, Frontiers in Psychology, Nature Translational Psychiatry, Nature Scientific Reports

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2009 - present Society for Neuroscience

FELLOWSHIPS AND AWARDS

Warr-Goodman Graduate Scholarship	LMH, University of Oxford	2004-2005
Henrietta Jex Blake	LMH, University of Oxford	2005-2006
Cyclosporin Academic Award	LMH, University of Oxford	2007
Young Researcher, honourable mention	ICMPC	2010
Best paper, honourable mention	CHI 2015	2015
LMU Excellence Seed Funding	LMU, Munich	2018

SCIENTIFIC ACHIEVEMENTS

In my PhD work with Prof. Irene Tracey (University of Oxford), I investigated non-nociceptive pain-related events which required devising new psychological paradigms for a neuroimaging context. Additionally, the methods-based aspect of my doctoral work included incorporating physiological noise parameters as well as behavioral and psychophysical measures to make better use of the imaging data. These early experiences provided a solid foundation in experimental design and neuroimaging but also a healthy respect for both the power and inherent limitations of the black box that is functional MRI.

Models of social interaction and alignment

In my first postdoc position (Max Planck Institute, Human Cognitive Brain Sciences), my primary focus was to use Repp and Keller's adaptive auditory virtual partner to probe the brain basis of dynamic cooperation. I adapted a powerful behavioural finger tapping paradigm to investigate the neural correlates of this basic form of interactive social cognition in diverse populations including trained musicians, healthy controls and autistic individuals. By varying a single error correction parameter, we modulated the programmable partner's level of adaptivity and investigated the impact on objective and subjective coordination measures as well as resulting brain activity. In a first imaging study, we varied the level of employed computer phase correction and explored a range of possible give-and-take between cooperating partners. We identified two distinct neural networks selectively activated during either easy, automatic entrainment (cortical midline regions) with a minimally adaptive virtual partner or during more cognitively challenging interactions when interacting with a highly adaptive virtual partner (right lateralized areas). In the next study, we varied the extent to which the human could lead and dictate the overall period and showed that right lateralized frontal areas dominate when leading. Additionally, we found that a subgroup of individuals with a strong tendency to lead employ less error correction and show greater activity in areas commonly associated with self-initiated action. A further study varied auditory feedback and thereby manipulated the level of distinction between self and other-initiated tones. While right lateralized parietal activation was seen to correlate with greater self-other distinction, a more distributed network of areas varied as a function of agency attribution error. Together with an extensive global network of collaborators, I have provided new theoretical conceptualisations of alignment, reciprocity and multisensory joint attention. I have co-edited a special issue and contributed a review detailing the most up-to-date findings related to interpersonal synchrony. In addition to this, I have focused on developing and using novel computational modelling approaches while also expanding beyond the dyad. Dealing with rich dynamical data, I am committed to identifying and using the best computational approaches for this context. In conjunction with Travis Wiltshire, we are currently developing a new toolbox of methods that can be used to quantify information exchange between coordinating partners. We are now testing a novel virtual reality environment which allows us to go beyond the dyad testing both small and extremely large groups. In the time of COVID, I have also extended my battery of paradigms to include an online Zoom-based mirror game task, the data from which we are applying novel methods to better capture temporal similarity and alignment across these more variable time courses.

Interacting with the world and others with two types of touch

In my second post-doctoral position at the Max Planck Institute with Prof. Tobias Grossman, I was fortunate to work with Line Löken to establish a testable protocol for investigating CT-optimal touch in 9 month old infants. Our 2014 paper has been widely cited and has been used to show how early on these fibres show tuning to CT-optimal stroking velocities as measured through physiological measures (i.e. heart rate) as well as behavioural responses. We are now developing and testing touch within the realm of immersive virtual reality to explore how vivid social touch experiences can be and if they are enhanced through physical interactions. We are again using multiple methods for capturing responses both at an implicit physiological and behavioural level as well as with subjective reports. Within the realm of discriminative touch, I have published both empirical and theoretical position papers on how our sense of touch provides greater levels of certainty than the visual modality. We are now working towards testing how learning and confidence vary across sensory modalities (vision, audition and touch). During the global COVID-19 crisis, I led a team in an impactful project on affective touch in the context of the pandemic, developing a novel touch-based app for citizen science and we ran the only longitudinal study investigating the impact of changing touch behaviours on wellbeing (https://www.unibw.de/virtualtouch-en). In my current position (J. Prof. Social affective touch, TU Dresden / CeTI.one), I am tasked with detailing and probing the neurocognitive mechanisms that allow for rich social touch experiences while also harnessing novel affective haptic technologies to improve mediated social touch in the digital realm. Together with my team in the ConTakt lab, we are at the forefront of the field of digitally mediated social touch driving innovation in haptic technologies and ensuring that these technologies do not replicate or replace physical touch but rather offer new opportunities to connect across distances.

My scientific career has paralleled a rich family life. I have achieved the above having had five children since 2010 without taking any non-statutory maternity leave. With a good sense now of how to balance my professional and personal life, I have recently turned my attention to applying for additional individual and group funding with several exciting projects in the pipeline and two grants totalling more than 1 million Euros to further my group's research in touch. Additionally, having received a great deal of support in my own training, I am **proud of my teaching** (~10 hours per week) **and supervisory activities** during each of my doctoral and post-doctoral positions.

RESEARCH OUTPUT ACTIVITIES

PUBLICATIONS

1. Dunckley P., Wise R.G., **Fairhurst M.**, Hobden P., Aziz Q., Chang L., Tracey I A comparison of visceral and somatic pain processing in the human brainstem using functional magnetic resonance imaging. *J Neurosci* 2005

2. **Fairhurst M.**, Wiech K., Dunckley P., Tracey I. Anticipatory brainstem activity predicts neural processing of pain in humans. *PAIN* 2007

3. **Fairhurst M.**, Fairhurst K, Berna Renella C, Tracey I.A. Simulated and physical pain produce overlapping brain network of activity except for posterior insular cortex. *Plos One* 2012

4. **Fairhurst M.T.**, Janata P., Keller P.E. Being and feeling in sync with an adaptive virtual partner: brain mechanisms underlying dynamic cooperativity. *Cerebral Cortex* 2012

5. Hove M.J., **Fairhurst M.T.**, Kotz S.A., Keller P.E. Synchronizing with auditory and visual rhythms: an fMRI assessment of modality differences and modality appropriateness. *Neuroimage* 2012

6. Uhlig M., **Fairhurst M.T.**, Keller P.E. The importance of integration and top-down salience when listening to complex multi-part musical stimuli. *Neuroimage* 2013

7. **Fairhurst M.T.**, Janata P., Keller P.E. Leading the follower: an fMRI investigation of dynamic cooperativity and leader-follower strategies in synchronization with an adaptive virtual partner. *Neuroimage* 2013

8. Ragert M., Fairhurst M.T., Keller P.E. Segregation and integration of complex auditory streams. *PloS One* 2014

9. **Fairhurst, M.T.,** Löken, L.S., Grossman, T. Physiological and behavioral responses reveal human infants' sensitivity to pleasant touch. *Psychological Science* 2014

10. Tajadura-Jimenez, A, Basia, M, Deroy, O, **Fairhurst, M,** Marquardt, Berthouze, N. As light as your footsteps: altering walking sounds to change perceived body weight, emotional state and gait. *Computer Human Interface* 2015

11. van der Steen, M.C., Jacoby, N., **Fairhurst, M.T.,** & Keller, P.E. Sensorimotor synchronization with tempo-changing auditory sequences: Modeling temporal adaptation and anticipation. *Brain Research* 2015

12. **Fairhurst, M.T.**, Pritchard, D., Ospina, D., Deroy, O. Bouba-Kiki in the plate: combining crossmodal correspondences to change flavour experience. *Flavour* 2015

13. Koehne, S., Behrends, A., **Fairhurst, M.T.**, Dziobek, I. Fostering Social Cognition through an Imitation- and Synchronization-Based Dance/Movement Intervention in Adults with Autism Spectrum Disorder: A Controlled Proof-of-Concept Study. *Psychother Psychosom* 2016

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14. **Fairhurst M.**T., Deroy O. Testing the shared spatial representation of magnitude of auditory and visual intensity. *J Exp Psychol Hum Percept Perform* 2017

15. Gallotti, M., Fairhurst M. T., Frith, C. Alignment in social interactions. *Consciousness and Cognition* 2017

16. **Fairhurst M.** T. Scott M., Deroy O. Matching face-voices pairings affect recall: Evidence from a real-life context. Plos One 2017

17. Tajadura-Jiménez A., Vakali M., **Fairhurst M.T**., Mandrigin A., Bianchi-Berthouze N., Deroy O. Auditory Pinocchio: Rising pitch changes the mental representation of one's finger length. *Scientific Reports* 2017

18. **Fairhurst M.**T., Travers E, Hayward V, Deroy O. Confidence is higher in touch than in vision in cases of perceptual ambiguity. *Scientific Reports* 2018

19. Deroy, O., & Fairhurst, M. (2019). Spatial Certainty. *Spatial Senses: Philosophy of Perception in an Age of Science*.

20. Hoehl, S., **Fairhurst, M.**, & Schirmer, A. (2020). Interactional synchrony: signals, mechanisms and benefits. *Social Cognitive and Affective Neuroscience*.

21. Travers, E., **Fairhurst, M. T.**, & Deroy, O. (2020). Racial bias in face perception is sensitive to instructions but not introspection. *Consciousness and cognition*, *83*, 102952.

https://link.springer.com/article/10.3758/s13423-020-01766-z

23. Schirmer, A., **Fairhurst, M.**, & Hoehl, S. (2020)."Being 'in sync' – Is interactional synchrony the key to understanding the social brain? Social Cognitive and Affective Neuroscience.

24. Tunçgenç, B., Travers, E., & **Fairhurst, M. T.** (2021). Leadership and tempo perturbation affect coordination in medium-sized groups. Scientific reports, 11(1), 4940.

25. Dumas, G. & **Fairhurst, M.T.,** (2021) Reciprocity and alignment: quantifying coupling in dynamic interactions. R. Soc. Open Sci. 8: 210138. https://royalsocietypublishing.org/doi/10.1098/rsos.210138

26. Croy, I., **Fairhurst, M.T.**, McGlone, F. (2022) The role of C-fibers in human social development. *Under Review*

27. **Fairhurst, M.T.**, McGlone, F. Croy, I. (2022) The primitive, priming sense: a communicative model of affective touch.

28. Müller, V., **Fairhurst, M. T.**, van Vugt, F. T., Keller, P. E., & Müller, M. F. (2022). Interpersonal synchrony and network dynamics in social interaction. Frontiers in Human Neuroscience, 16, 1095735.

29. Najm, A., Hadjipanayi, C., Michael-Grigoriou, D., Banakou, D., McGlone, F., & **Fairhurst, M.** (2022, October). The Virtual Touch Toolkit: An Interactive Media Mobile Application for Promoting Well-Being through Affective and Social Touch. In 2022 International Conference on Interactive Media, Smart Systems and Emerging Technologies (IMET) (pp. 1-4). IEEE. https://ieeexplore.ieee.org/document/9929934

30. A. Bellard, J. Mathew, W. Sun, L. Denkow, A. Najm, D. Michael-Grigoriou, P. Trotter, F. McGlone, **M.T. Fairhurst** & V. Cazzato, "Topography and relationship-specific social touching in individuals displaying body image disturbances" Scientific Reports, 13(1), 13198. 2023. <u>https://doi.org/10.1038/s41598-023-39484-w</u>

31. Fairhurst, M. T., Tajadura-Jiménez, A., Keller, P. E., & Deroy, O. (2023). You, me and us: Maintaining self-other distinction enhances coordination, agency and affect. iScience.

32. T. Grossmann and **M.T. Fairhurst**, "Genetic variability in the oxytocin system is linked to individual differences in cuddliness among human infants", Psychoendocrinology, 2023 <u>https://doi.org/10.1016/j.psyneuen.2023.106419</u>

33. Valori, I. Jung, M. and **Fairhurst, M.T.** Social touch to build trust: a systematic review of technology-mediated and unmediated interactions. (2023) Computers in Human Behaviour

BOOKS AND BOOK CHAPTERS

1. **Fairhurst M.** Neurogenetic Imaging. Book chapter in: Gene Therapy - Prospective assessment in its societal context. Niewohner & Tannert (Eds), Elsevier (pub). 2006.

2. Deroy, O., Fairhurst, M.T. Spatial certainty: Feeling is the truth. In press

3. Fairhurst, M. T. (2020). Modeling Dynamic Coupling in Social Interactions. In Discrete and Continuous Models in the Theory of Networks (pp. 153-168). Birkhäuser, Cham.

3. Tajadura-Jiménez A., **Fairhurst M.T.**, Deroy O.Sensing the body through sound. In Routledge Handbook of Bodily Awareness (Forthcoming)

4. Wiltshire, T. & **Fairhurst, M.** Dynamical Systems and Collaborative Creativity in Routledge Handbook of Creative Cognition (Forthcoming)

5. **Fairhurst, M.T.,** Give and take: How we become aligned in body and mind. London. Routledge. (under contract)

6. Deroy, O., **Fairhurst, M.T.** Philosophy and cognitive neuroscience. London: Routledge. (under contract)

INVITED TALKS, POSTERS AND PRESENTATIONS

1. Dunckley P, Wise RG, **Fairhurst M**, Hobden P, Aziz Q, Chang L, Tracey I A comparison of visceral and somatic pain processing in the human brainstem using functional magnetic resonance imaging.

2. Fairhurst M. Neurogenetic Imaging. MDC – European Gene Therapy Workshop (Berlin, May 2005)

3. **Fairhurst M**, Dunckley P, Tracey I. High Resolution fMRI of Human Brainstem: Anticipation and the Descending Pain Modulatory Pathway **IASP, 11th World Congress on Pain** (Sydney, August 2005)

4. **Fairhurst M**, Wiech K, Dunckley P, Tracey I. Anticipatory brainstem activity predicts neural processing of pain in humans. **EFIC**, **Istanbul Pain in Europe V** (September 2006)

5. **Fairhurst M**, Berna Renella C, Tracey I.A. Anticipation and Laterality – nociceptive processing within the human cerebellum. **CNS, Annual Meeting** (New York , May 2007)

6. Leknes S, Fairhurst M, Duncan K, Brooks J, Tracey I. Imaging pleasant pain relief. CNS Annual meeting. (New York, May 2007)

7. **Fairhurst M**, Fairhurst K, Berna Renella C, Tracey I.A. Short-term episodic memory of pain: "Real" and "Recalled Imagined" Pain. **CCNi, Brunel University** (London, March 2007)

8. Fairhurst M, Berna Renella C, Tracey I.A. Neural correlates of imagined pain and fear of pain: functional imaging of the fear of pain questionnaire-iii. WIP, 4th World Congress World Institute of Pain (Budapest, September 2007)

9. Berna C, Fairhurst M, Goodwin GM, Tracey I. The influence of personality on subjective pain perception: a psychophysical study. WIP, 4th World Congress World Institute of Pain (Budapest, September 2007)

10. **Fairhurst M**, Anwander A, Repp BH, Keller PE. The effect of musical experience on error correction and correlated white matter adaptations. **BACN**, **University College of London (UCL)**. (London, September 2009)

11. Fairhurst K, **Fairhurst M**, Tracey I. Measuring the effect of time delay on pain recall using FMRI. **BACN, University College of London (UCL)**. (London, September 2009)

12. Fairhurst M. T., Janata P., Repp B., Stelzer J., & Keller P.E. (2010). FMRI investigation of dynamic cooperativity: synchronised finger tapping with an adaptive virtual partner. Talk presented at **11th International Conference on Music Perception & Cognition (ICMPC11)**. Seattle, WA, USA. 23-27 August

Fairhurst M. T., Janata, P., Repp, B., Stelzer, J., & Keller, P. E. (2010). FMRI investigation of dynamic cooperativity: synchronised finger tapping with an adaptive virtual Society for Neuroscience (SFN)
San Diego, California (November 2010)

14. Fairhurst M. T., Janata, P., Repp, B., Stelzer, J., & Keller, P. E. FMRI investigation of dynamic cooperativity: synchronised finger tapping with an adaptive virtual SFN 2011, Washington DC (November 2011)

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15. Uhlig, M., **Fairhurst, M.T.**, & Keller P.E. (2011) . What aspects of music grab our attention more? An investigation of the effects of musical structure and performance asynchrony on the perception of leader-follower relations and quality during selective attention to a piano duet. Talk presented at **SFN Annual Meeting 2011.** Washington DC, USA. 11-16 November, 2011.

16. Keller, P.E., Pecenka, N., **Fairhurst, M.T.**, Repp, B. (2011) Relations between basic temporal error correction processes and the quality of interpersonal coordination. Talk presented at **4**th **Joint Action Meeting. Austrian Academy of Sciences**. Vienna, Austria. 7-9 July, 2011.

17. **Fairhurst, M.T.** (2011). Dynamic cooperation with a "virtual partner". Invited talk at Goldsmiths, University of London. London, U.K. 19 October, 2011.

18. Van der Steen, M.C. (Marieke), **Fairhurst, M.T.**, Keller, P.E. (2012) ADAM in action: working with an adpative and anticipatory virtual partner. Talk presented at **EBRAMUS consortium meeting Spring school.** Ghent, Belgium. 27 February -4 March, 2011.

19. Fairhurst, M.T., Janata, P. Keller, P.E. (2012). Leaders and followers: an fMRI study of dynamic cooperation using an adaptively paced finger-tapping task. Poster presented at Organization for Human Brain Mapping (OHBM) Annual Meeting. Beijing, China. 10 – 14 June, 2012.

20. Uhlig, M., **Fairhurst, M.T.,** Keller, P.E. (2012). The importance of integration when selectively listening to complex multi-part musical stimuli. Poster presented at **OHBM Annual Meeting**. Beijing, China. 10 – 14 June, 2012.

21. Van der Steen, M.C. (Marieke), **Fairhurst, M.T.**, Keller, P.E. (2012) Tapping along with ADAM: synchronizing with an adaptive and anticipatory virtual partner. Poster presented at **NCM conference**, Venice, Italy. 23-28 April, 2012.

22. Van der Steen, M.C. (Marieke), **Fairhurst, M.T.,** Keller, P.E. (2012) Investigating the role of adaptation and anticipatory mechanisms on sensorimotor synchronization using ADAM. Poster presented at **PoRT workshop**. Glasgow, U.K. 19-21 July, 2012.

23. Köhne, S., **Fairhurst, M.T.,** Behrends, A., Dziobek, I. (2013) Sensorimotor synchronization and empathy in high-functioning autism. **6th Scientific Meeting for Autism Spectrum Conditions (WTAS)** Bonn, Germany. 21-22February, 2013

24. Fairhurst, M.T., Deroy, O. Magnitude estimation across the senses. ESPP 2014, Noto September 16-19, 2014.

25. Fairhurst, M.T. The dynamic nature of two-way social interactions. We-mode workshop, Aarhus.22-23 September 2014.

26. **Fairhurst, M.T.** Beyond synchronisation: Characterising dynamic, reciprocal two-way interactions. **TSC 2015**, Helsinki 9-13 June, 2015

27. Fairhurst, M.T., Deroy, O. Do representations of magnitude share a single mental space? An auditory and audio-visual test using loudness and luminance. IMRF 2015, Pisa 13-16 June 2015

10

28. Fairhurst, M.T. Mental alignment and reciprocity: Characterising dynamic, reciprocal two-way interactions. Social Cognition Seminar Series. UCL, 16th June 2016

29. Fairhurst, M.T., Deroy, O. Trusting Our Senses: Metacognition and Confidence Across Sensory Modalities. ICPS 2017, Vienna 23-25th March 2017

30. **Fairhurst, M.T.** The perceptual bases of mental alignment and reciprocity **OCCAM 2017**, Osnabrueck 6-8th July 2017

31. Fairhurst M.T. What is special about touch? ISATCA 2018 Dresden 1-2nd February 2018

32. Fairhurst, M.T., Tajadura-Jiménez, A., Keller, P.E., Deroy, O. The sound of us walking together in time and space: Exploring how temporal coupling affects represented body size, peripersonal and interpersonal space in group interactions. **IMRF 2018** Toronto,, Canada 14-17th June 2018

33. **Fairhurst, M.T.** Doing things together in time: Temporal coordination in dyads and groups. Aligned 2019, Munich 6-8th May, 2019

34. Fairhurst, M.T. Walking together in groups. Invited talk University of Barcelona, 24th February, 2020

35. **Fairhurst, M.T.** A hunger for touch? Investigating the impact of changes in touch behaviour during & post COVID-19.Invited talk Liverpool John Moores University, 15th July, 2020

36. **Fairhurst, M.T.** A hunger for touch? Investigating the impact of changes in touch behaviour during & post COVID-19. socialBRIDGES 22-24th July 2020

37. Moll, M. & Fairhurst, M.T. Learning for computers and humans: a case study in reinforcement learning for probabilistic selection tasks? socialBRIDGES 21-23rd April, 2021.

38. Fairhurst, M.T., Tajadura-Jiménez, A., Keller, P.E., Deroy, O. Situating the "me" in the "we": The effect of temporal coordination on how we move and how we feel about ourselves and others. ESCAN2021 June 24th, 2021.