

General information

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Positions

2023: post-doctoral researcher, Santa Lucia Foundation, Rome

2020-2022: post-doctoral researcher, Department of Psychology, Sapienza University, Rome

2018-2020: post-doctoral researcher, Biomedical and Neuromotor Sciences (DIBINEM), Alma Mater Studiorum, Bologna University

2016-2017: post-doctoral researcher, Santa Lucia Foundation, Rome

2015: post-doctoral researcher, Department of Psychology, Sapienza University, Rome

2013-2014: post-doctoral researcher, Santa Lucia Foundation, Rome

2008: Junior researcher, Santa Lucia Foundation, Rome

2007: Junior researcher, Department of Neuroscience and Imaging, University "G. d'Annunzio", Chieti, Italy.

Education

2018-2027: ASN- Scientific qualification as Associate Professor in Psychobiology and Psychophysiology

2012: PhD in Neuroscience, Department of Neuroscience and Imaging, University "G. d'Annunzio", Chieti, Italy.

2005: Master degree (*summa cum laude*) in Cognitive Psychology, University "G. d'Annunzio", Chieti, Italy.

Grants

2021-23: PI for the project "World-relative object motion: How the brain detects object motion while we are moving". Grant from the BIAL Foundation 2020/21 edition (€45000).

2021: PI for the project "Role of optic flow in spatial updating", Starting grant for research activity, prot. AR22117A5CA16E96, Sapienza University, Rome (€2250).

2015: PI for the project "Neural representation of familiar topographical space", Starting grant for research activity, prot. C26N15MZEM, Sapienza University, Rome (€2425).

Visiting activity

2012 (May-July) Space and Memory Group, Institute of Cognitive Neuroscience, University College of London.

2007: (September- December) Physiology of Perception and Action Laboratory (LPPA), Collège de France, Paris).

Teaching experience

2020: Teacher in Sport Psychology, "Foro Italico" University, Rome

2014: Tutor for lab activities: summer school AIP (Sezione di Psicologia sperimentale) in Neuroscience methods
2012: Teacher of Psychobiology 2 (Practice Experience)
2008-2011: Teacher Assistant in Psychobiology, Biological Psychology, Physiological Psychology,

Society memberships

2009: Society of Neuroscience (SFN)
2012: Italian Association of Psychology, Experimental section
2023: Italian Association of Neuropsychology

Editorial activity

Expert Reviewer for International Peer Review Journals: NeuroImage, Cerebral Cortex, Scientific report, Hippocampus, Brain Structure and Function, Experimental Brain Research, Brain and Behavior, Frontiers in Psychology, IBRO Neuroscience Reports

Publications

1. Bencivenga F, Tullo MG, **Sulpizio V**, Galati G (2023). Interhemispheric interplay between the left and right premotor cortex during grasping as assessed by dynamic causal modelling. DOI: 10.1038/s41598-023-31602-y.
2. Cardelli L, Tullo MG, Galati G, **Sulpizio V** (2023). Effect of optic flow on spatial updating: insight from an immersive virtual reality study. *Experimental Brain Research*, 241(3), pp. 865–874
3. **Sulpizio V***, Strappini F*, Fattori P, Galati G, Galletti C, Pecchinenda A, Pitzalis S (2022). The human middle temporal cortex responds to both active leg movements and egomotion-compatible visual motion. *Brain Struct Funct.* 227(8):2573-2592. doi: 10.1007/s00429-022-02549-z.
4. Bellagamba M*, **Sulpizio V***, Fattori P, Galati G, Galletti C, Maltempo T, Pitzalis S (2022). *Equal contribution. Egomotion- related visual areas respond to goal-directed movements *Brain Structure and Function*. In press. *Brain Struct Funct.* doi: 10.1007/s00429-022-02523-9. *Equal contribution.
5. Tullo MG, Almgren H, Van de Steen, F, **Sulpizio V**, Marinazzi D, Galati G (2022). Individual Differences in Mental Imagery Modulate Effective Connectivity of Scene-Selective Regions During Resting State *Brain Struct Funct.* doi: 10.1007/s00429-022-02475-0.
6. Costa A, Bivona U, **Sulpizio V**, Nappo R, Mastrilli L, Formisano R, Aloisi M, Contrada M, Caltagirone C, Galati G (2022). Reduced Priming Effect for Visual-Spatial Perspective Taking in Patients With Severe Acquired Brain Injury. *Arch Clin Neuropsychol.* 23:acab069. doi: 10.1093/arclin/acab069.
7. Di Marco S*, **Sulpizio V***, Bellagamba M, Fattori P, Galati G, Galletti C, Lappe M, Maltempo T, Pitzalis S (2021). Multisensory integration in cortical regions responding to locomotion-related visual and somatomotor signals. *Neuroimage.*;244:118581. doi: 10.1016/j.neuroimage.2021.118581. *Equal contribution.
8. **Sulpizio V**, Berchicci M, Di Russo F, Galati G, Grasso M, Iosa M, Lucci G, Paolucci S, Ripani M, Pitzalis S. (2021). Effect of Exoskeleton-Assisted Rehabilitation Over Prefrontal Cortex in Multiple Sclerosis Patients: A Neuroimaging Pilot Study. *Brain Topogr.* doi: 10.1007/s10548-021-00858-w.

9. Boccia M, **Sulpizio V**, Bencivenga F, Guariglia C, Galati G. (2021). Neural representations underlying mental imagery as unveiled by representation similarity analysis *Brain Struct Funct.* 226:1511-1531. doi: 10.1007/s00429-021-02266-z.
10. Maltempo T, Pitzalis S, Bellagamba M, Di Marco S, Fattori P, Galati G, Galletti C, **Sulpizio V** (2021). Lower visual field preference for the visuomotor control of limb movements in the human dorsomedial parietal cortex. *Brain Struct Funct.* doi: 10.1007/s00429-021-02254-3.
11. Bencivenga F, **Sulpizio V**, Tullo MG, Galati G (2021). Assessing the effective connectivity of premotor areas during real vs imagined grasping: a DCM-PEB approach. *Neuroimage.* 2021 230:117806. doi: 10.1016/j.neuroimage.2021. IF: 6,556. Citazioni: 2; Anni decorsi: 0; media citazioni per anno: 0; Banca dati: Scopus.
12. Di Marco S, Fattori P, Galati G, Galletti C, Lappe M, Maltempo T, Serra C, **Sulpizio V**, Pitzalis S (2021). Preference for locomotion-compatible curved paths and forward direction of self-motion in somatomotor and visual areas. *Cortex* 137:74-92. doi: 10.1016/j.cortex.2020.12.021.
13. **Sulpizio V**, Galati G, Fattori P, Galletti C, Pitzalis S (2020). A common neural substrate for processing scenes and egomotion-compatible visual motion. *Brain Struct Funct.* doi: 10.1007/s00429-020-02112-8.
14. **Sulpizio V**, Neri A, Fattori P, Galletti C, Pitzalis S, Galati G (2020). Real and Imagined Grasping Movements Differently Activate the Human Dorsomedial Parietal Cortex. *Neuroscience* 434:22-34. doi: 10.1016/j.neuroscience.2020.03.019.
15. Berchicci M, **Sulpizio V**, Mento G, Lucci G, Civale N, Galati G, Pitzalis S, Spinelli D, Di Russo F (2020). Prompting future events: Effects of temporal cueing and time on task on brain preparation to action. *Brain Cogn.* 141:105565. doi: 10.1016/j.bandc.2020.105565.
16. Pitzalis S, Serra C, **Sulpizio V**, Committeri G, De Pasquale F, Fattori P, Galletti C, Sepe R, Galati G (2020). Neural bases of self- and object-motion in a naturalistic vision. *Hum Brain Mapp.* 41(4):1084-1111. doi: 10.1002/hbm.24862.
17. Pitzalis S, Serra C, **Sulpizio V**, Di Marco S, Fattori P, Galati G, Galletti C (2019). A putative human homologue of the macaque area PEc. *Neuroimage*; 202:116092. doi: 10.1016/j.neuroimage.2019.116092.
18. Serra C, Galletti C, Di Marco S, Fattori P, Galati G, **Sulpizio V**, Pitzalis S. (2019) Egomotion-related visual areas respond to active leg movements. *Hum Brain Mapp.* 1;40(11):3174-3191. doi: 10.1002/hbm.24589.
19. Boccia M, **Sulpizio V**, Teghil A, Palermo L, Piccardi L, Galati G, Guariglia C (2019). The dynamic contribution of the high-level visual cortex to imagery and perception *Hum Brain Mapp.* 2019 Jun 1;40(8):2449-2463. doi: 10.1002/hbm.24535.
20. Berchicci M, Lucci G, Pitzalis S, **Sulpizio V**, Grasso MG, Ripani M, Paolucci S, Iosa M, Galati, G., Di Russo, F (2019). Exoskeleton-assisted rehabilitation training improves cognitive and motor functions in multiple sclerosis patients. *Neurological Disorders and Imaging Physics, Volume 2: Engineering and clinical perspectives of multiple sclerosis, 2019*, pp. 22–39
21. **Sulpizio V**, Boccia M, Guariglia C, Galati G (2018). Neural Codes for One's Own Position and Direction in a Real- World "Vista" Environment. *Front Hum Neurosci.* 2018 Apr 30;12:167. doi: 10.3389/fnhum.2018.00167
22. **Sulpizio V**, Lucci G, Berchicci M, Galati G, Pitzalis S, Di Russo F (2017). Hemispheric asymmetries in the transition from action preparation to execution. *Neuroimage.* 148:390-402. doi: 10.1016/j.neuroimage.2017.01.009.
23. **Sulpizio V**, Boccia M, Guariglia C, Galati G (2017). Implicit coding of location and direction in a familiar, real- world "vista" space. *Behav Brain Res.* 10;319:16-24. doi: 10.1016/j.bbr.2016.10.052.

24. Boccia M, **Sulpizio V**, Nemmi F, Guariglia C, Galati G (2017). Direct and indirect parieto-medial temporal pathways for spatial navigation in humans: evidence from resting-state functional connectivity. *Brain Struct Funct.* 222(4):1945-1957. doi: 10.1007/s00429-016-1318-6.
25. Boccia M, **Sulpizio V**, Palermo L, Piccardi L, Guariglia C, Galati G. (2017). I can see where you would be: patterns of fMRI activity reveal imagined landmarks. *Neuroimage.* doi: 10.1016/j.neuroimage.2016.08.034.
26. Indovina I, Maffei V, Mazzarella E, **Sulpizio V**, Galati G, Lacquaniti F. (2016). Path integration in 3D from visual motion cues: A human fMRI study. *Neuroimage.* S1053-8119(16)30316-0. doi: 10.1016/j.neuroimage.2016.07.008.
27. Spitoni GF, Pireddu G, Galati G, **Sulpizio V**, Paolucci S, Pizzamiglio L. (2016). Caloric Vestibular Stimulation Reduces Pain and Somatoparaphrenia in a Severe Chronic Central Post-Stroke Pain Patient: A Case Study. *PLoS One.* doi: 10.1371/journal.pone.0151213PLOS ONE.
28. **Sulpizio V**, Boccia M, Guariglia C, Galati G. (2016). Functional connectivity between posterior hippocampus and retrosplenial complex predicts individual differences in navigational ability. *Hippocampus.* doi: 10.1002/hipo.22592.
29. Di Russo F, Lucci G, **Sulpizio V**, Berchicci M, Spinelli D, Pitzalis S, Galati G. (2016). Spatiotemporal brain mapping during preparation, perception, and action. *Neuroimage.* 126:1-14. doi: 10.1016/j.neuroimage.2015.11.036.
30. **Sulpizio V**, Committeri G, Lambrey S, Berthoz A, Galati G. (2016). Role of the human retrosplenial cortex/parieto-occipital sulcus in perspective priming. *Neuroimage* 125:108-119. doi: 10.1016/j.neuroimage.2015.10.040.
31. Bisby JA, King JA, **Sulpizio V**, Degeilh F, Valerie Curran H, Burgess N. (2015). Extinction learning is slower, weaker and less context specific after alcohol. *Neurobiol Learn Mem.* 2015 Jul 30;125:55-62. doi: 10.1016/j.nlm.2015.07.014.
32. Boccia M, Piccardi L, Palermo L, Nemmi F, **Sulpizio V**, Galati G, Guariglia C. (2015). A penny for your thoughts! patterns of fMRI activity reveal the content and the spatial topography of visual mental images. *Hum Brain Mapp.* 36:945-58. doi: 10.1002/hbm.22678.
33. **Sulpizio V**, Committeri G, Metta E, Lambrey S, Berthoz A, Galati G. (2015). Visuospatial transformations and personality: evidence of a relationship between visuospatial perspective taking and self-reported emotional empathy. *Exp Brain Res.* 233:2091-102. doi: 10.1007/s00221-015-4280-2.
34. Montefinese M, **Sulpizio V**, Galati G, Committeri G. (2015). Age-related effects on spatial memory across viewpoint changes relative to different reference frames. *Psychol Res.* 79:687-97. doi: 10.1007/s00426-014-0598-9.
35. **Sulpizio V**, Committeri G, Galati G. (2014). Distributed cognitive maps reflecting real distances between places and views in the human brain. *Front Hum Neurosci.* 8:716. doi: 10.3389/fnhum.2014.00716.
36. Boccia M, Piccardi L, Palermo L, Nemmi F, **Sulpizio V**, Galati G, Guariglia C. (2014). One's own country and familiar places in the mind's eye: different topological representations for navigational and non-navigational contents. *Neurosci Lett.* 579:52-7. doi: 10.1016/j.neulet.2014.07.008.
37. Vastano R, **Sulpizio V**, Steinisch M, Comani S, Committeri G. (2014). Embodied and disembodied allocentric simulation in high schizotypal subjects. *Exp Brain Res.* 3023-33. doi: 10.1007/s00221-014-3991-0.
38. **Sulpizio V**, Committeri G, Lambrey S, Berthoz A, Galati G. (2013). Selective role of lingual/parahippocampal gyrus and retrosplenial complex in spatial memory across

viewpoint changes relative to the environmental reference frame. *Behav Brain Res.* 242:62-75. doi: 10.1016/j.bbr.2012.12.031.

39. Steinisch M, **Sulpizio V**, Iorio AA, Di Naccio A, Haueisen J, Committeri G, Comani S. (2011). A virtual environment for egocentric and allocentric mental transformations: a study on a nonclinical population of adults with distinct levels of schizotypy *Biomed Tech (Berl)*. 56:291-9. doi: 10.1515/BMT.2011.10.