BIOGRAPHICAL SKETCH

CHRISTIAN VALT	Post-doc r	POSITION TITLE Post-doc researcher (Psychiatric Neuroscience		
eRA COMMONS USER NAME (credential, e.g., agency login)	Group, Ba	Group, Bari)		
EDUCATION/TRAINING (Begin with baccalaureate or other initial residency training if applicable.)	al professional education	, such as nursing, in	clude postdoctoral training and	
INSTITUTION AND LOCATION	DEGREE	MM/YYYY	FIELD OF STUDY	
University of Trento, Italy	B.A.	09/2006	Cognitive Psychology	
		02/2000	Neuroscience	
University of Trento, Italy	M.S.	03/2009	(Psychology)	

A. Personal Statement

"Mental illnesses are real, diagnosable, treatable brain disorders" (Hyman, 1998).

This statement has been the primary guideline of my research. In my investigation of the brain from a psychological perspective, I started with basic research of cognitive functions, and I have then moved to study abnormal brain processing in mental disorders. Within this clinical framework, my interest has focused on the identification of abnormal brain responses that can allow a neurobiology-based diagnosis, prognosis and treatment of different psychopathologies.

After a bachelor's degree in cognitive psychology and a master's degree in neuroscience at the University of Trento (Italy), I moved to Wales for a Ph.D. in cognitive neuroscience at Bangor University. At the conclusion of my Ph.D. in 2013, I have worked as a post-doc researcher at the International Psychoanalytic University (IPU) Berlin, under the supervision of Prof. Dr. Birgit Stürmer. My project at the IPU focused on the dynamic processing of internal and external signals for performance monitoring and its influences on emotion perception and interpretation. Within this framework, I have employed brain electrophysiological recording and peripheral physiological recording (skin conductance response) to investigate how healthy participants and patients process emotional faces presented as ecological feedback of personal performance. Recently, I have investigated whether psychotherapy can induce significant normalization of abnormal brain functioning in panic patients.

Since June 2020, I have been working as a post-doc researcher in the Psychiatric Neuroscience Group of the Department of Basic Medical Science, Neuroscience and Sense Organs, University of Bari. Here, I am member of the MEG lab, working on various studies of schizophrenia and the risk of psychosis. My current project investigates whether the abnormal processing of auditory deviant stimuli can be a diagnostic and prognostic index for the risk of schizophrenia. My long-term goal is to conduct top-quality research in personalized psychiatry, with important applications for the early identification and treatment of subjects with a concrete risk for psychosis.

B. Positions and Honors

Positions and Employment

2013-2020 Post-doc researcher and lecturer of seminars and lectures at the International Psychoanalytic

University Berlin (Germany)

2020- Post-doc researcher at the Department of Basic Medical Science, Neuroscience and Sense

Organs, University of Bari

Professional Experience

2013-2020 Leader of the EEG-lab of the International Psychoanalytic University Berlin (Germany)

2016-2020 Member of the ethics committee of the International Psychoanalytic University Berlin (Germany)

2018-2019 Recipient of Erasmus+ scholarships for teaching at the Department of Philosophy, University of Niš (Serbia), and the Department of Philosophy, University of Sarajevo (Bosnia and

Herzegovina)

Professional Memberships

2016- European Society of Cognitive and Affective Neuroscience

<u>Honors</u>

2009 125 Anniversary studentship at Bangor University

C. Contributions to science

- 1. My studies contributed to clarify the relevance of rapid response learning for priming in face recognition.
 - a) Valt C, Klein C, Boehm, SG. (2015). Dissociation of rapid response learning and facilitation in perceptual and conceptual networks of person recognition. British Journal of Psychology 106(3): 375-396. (PMID: 25291047)
 - b) **Valt C**, Stürmer B, Sommer W, & Boehm S. (2017). *Early response activation in repetition priming: An LRP study*. Experimental Brain Research 235: 2927-2934. (PMID: 28702835)
- 2. My studies offered new insight into the dynamic processing of internal and external signal processing for performance monitoring, and the influence of performance on the processing of emotional faces and social comparison.
 - a) Valt C, Palazova M, Stürmer B. (2017). Processing of internal and external signals for performance monitoring in the context of emotional face processing. Advances in Cognitive Psychology 13(3): 190-200. (PMID: 29034047)
 - b) **Valt, C,** Stürmer B. (2017). On the correct side of performance: Processing of internal and external signals in response speed evaluation. International Journal of Psychophysiology 117: 26-36. (PMID: 28408136).
 - c) **Valt C**, Stürmer B. (2018). *Processing genuine and non-genuine smiles as social response to personal performance: An event-related brain potential (ERP) study.* Emotion 18: 551-562 (PMID: 28581322)
 - d) **Valt C**, Sprengeler MK, Stürmer B. (2018). *Linking internal and external signals for performance monitoring: An event-related potential (ERP) study.* Psychophysiology 55(9): e13085 (PMID: 29663423).
 - e) **Valt C**, Sprengeler MK, Stürmer B. (2020). *Feedback processing in the context of social comparison*. Psychophysiology 57(3): e13489. (PMID: 31578749)
 - f) **Valt C**, Stürmer B. (under review). On the processing of optimal performances: Studying arousal evoked by being correct and fast. Brain and Behaviour

- 3. My studies investigated the processing of external signals in panic disorder and major depressive disorder, before the beginning of psychological treatment and after one year of therapy.
 - a) **Valt C**, Huber D, Erhardt I, Stürmer B. (2018). *Internal and external signal processing in patients with panic disorder: An event-related potential (ERP) study.* PlosONE 13(11): e0208257. (PMID: 30496321).
 - b) **Valt C**, Huber D, Stürmer B. (2020). Treatment-related changes towards normalization of the abnormal external signal processing in panic disorder. PlosONE 15(1): e0227673. (PMID: 31986163).
 - c) **Valt C**, Huber D, Kontaxi S, Frank J, Nörtemann M, Stürmer B. (under review). *The processing of visual signals in major depressive disorder.* Clinical EEG and Neuroscience
- D. Complete List of Published Work: https://pubmed.ncbi.nlm.nih.gov/?term=Christian+Valt
- E. Research Support

Completed Research Support

DFG (Germany)

Stürmer (PI)

April 1st 2016 – April 1st 2019

"Handlungsüberwachung in sozialen Interaktionen: Dynamic interner und externer Signalverarbeitung (Performance monitoring in social interactions: dynamics in internal and external signal processing)"

The goal of this project was to explore how the brain can flexibly allocate monitoring resources to internal or external signals according to contextual social contexts or contingent psychological disorders.

Role: Co-PI and recipient

April 1st 2016 – April 1st 2019

Metallocate monitoring resources to internal or external signal processing)"

Amount: EUR 200,000

IPU-research support Valt (PI) December 4th 2018 – January 31st 2020 "The interplay of internal and external signal processing in patients with depression: An event-related brain potential study"

This funding was targeted for a study of major depressive disorder conducted in cooperation with the München Klinik, Harlachin.

Role: PI Amount: EUR 9,984