



Società Italiana di Psicofisiologia e Neuroscienze Cognitive

XXVII

Congresso della Società Italiana
di Psicofisiologia e Neuroscienze Cognitive

THE 'FEELING' BRAIN



FERRARA

14-16 NOVEMBRE 2019



XXVII

Congresso della Società Italiana di Psicofisiologia e Neuroscienze Cognitive

THE 'FEELING' BRAIN

SEDE CONGRESSUALE

Sala ESTENSE

Sala plenaria

Piazza del Municipio, 2 - 44121 Ferrara
<http://servizi.comune.fe.it/3843/sala-estense>

Sala Imbarcadero 1 / Castello Estense

Sessioni poster, mostra espositiva, colazioni di lavoro, programma sociale

Castello Estense Largo Castello 1, 44121 Ferrara
<https://www.castelloestense.it>

SEGRETERIA SCIENTIFICA

Società Italiana di Psicofisiologia e Neuroscienze Cognitive

CF 92069070529

Sede legale:

Via Braccio Martello, 63 - 73100 Lecce
c/o Prof.ssa Marina De Tommaso

SEGRETERIA ORGANIZZATIVA

Anna Gnozzi, Uvet Congress & Learning

Via A. Lamarmora, 36 - 50121 Firenze
Office: +39 055 5539742
Fax: +39 055 5539741
Mobile: +39 335 7588531
sipf2019@uvetgibt.com

Giovedì 14 Novembre

SALA ESTENSE

08.30 - 09.00 Apertura lavori

09.00 - 11.00 **COMUNICAZIONI ORALI, SESSIONE 1**

Chair Francesca Garbarini - Simone Rossi

11.00 - 11.30 *Pausa caffè*

11.30 - 12.30 **SIMPOSIO GIOVANI**

The bodily self-consciousness: from touch to action

Chair Gerardo Salvato - Laura Zapparoli

From the body to the self: Affective touch modulates the sense of body ownership

Laura Crucianelli (Karolinska Institutet, Svezia)

When your body becomes mine: behavioural and physiological evidence from brain damaged-patients with delusional body ownership

Carlotta Fossataro (Università di Torino)

How body awareness shapes cognition

Gerardo Salvato (Università di Pavia)

12.30 - 13.30 **LETTURA MAGISTRALE**

Robotics and Neuroscience

Prof.ssa Maria Chiara Carrozza (Scuola Superiore Sant' Anna di Pisa)

SALA IMBARCADERO 1 / CASTELLO ESTENSE

13.30 - 15.30 **POSTER, SESSIONE 1**

Commissione Viviana Betti - Laila Craighero - Marina de Tommaso - Francesco Fattapposta

Colazione di lavoro

SALA ESTENSE

15.30 - 16.30 **SIMPOSIO**

Embodied Aesthetics: Sharing sensorimotor states in Art Experience and Production

Chair Cosimo Urgesi - Alessandra Finisguerra

The motor component of aesthetic processing
Cinzia Di Dio (Università Cattolica del Sacro Cuore, Milano)

Multi-level sensorimotor coordination in ensemble music
Alessandro D'Ausilio (Università di Ferrara)

Simultaneous Cooperation and Competition in the Evolution of Musical Behavior:
Sex-Related Modulations of the Singer's Formant in Human Chorusing
Giacomo Novembre (Istituto Italiano di Tecnologia, CLNS@SAPIENZA, Roma)

16.30 - 17.30 **LETTURA MAGISTRALE**

Neuromusic and Neuroscience

Prof. Giuliano Avanzini (*Fondazione IRCCS Istituto Neurologico C. Besta Milano*)



Venerdì 15 Novembre

SALA ESTENSE

09.00 - 10.00 **COMUNICAZIONI ORALI, SESSIONE 2**

Chair Nadia Bolognini - Laila Craighero

10.00 - 11.00 **SIMPOSIO**

Long-Term Memory: new insights and perspectives for neuromodulation

Chair Francesco Neri - Elisa Ciaramelli

fMRI activation during short story recall task - a performance-based correlation study
Francesco Neri (Siena Brain Investigation & Neuromodulation Laboratory, Si-Bin Lab, Siena)

Emotional context shapes the serial position curve
Fabio Giovannelli (Università di Firenze)

Neuromodulation of episodic memory in aging
Marco Sandrini (University of Roehampton, Londra - Regno Unito)

11.00 - 11.30 *Pausa caffè*

11.30 - 12.30 **SIMPOSIO GIOVANI**

To move or not to move this is the question. How to improve or worsen cognitive and affective performances by motor cortex activation

Chair Eleonora Gentile - Marina De Tommaso

Short-term pain related cortical changes could depend upon the modality of contemporary motor cortex activation: an EEG/fNIRS study
Eleonora Gentile (Università di Bari)

The role of motor cortex in central sensitization syndromes: pathophysiological and therapeutic implications
Simona Maccora (Università di Palermo)

The complex relationship between motor cortex, pain and cognition. New insights from non-invasive stimulation studies
Roberta Baschi (Università di Palermo)

12.30 - 13.30 **SIMPOSIO GIOVANI**

Tell me how you prepare and I will tell you how you process. The event-related potentials (ERPs) as a tool to understand the way the brain anticipates future events

Chair Rinaldo Perri - Francesco Di Russo

Anticipatory ERPs during visual, auditory and somatosensory tasks: modality-specific or supramodal?
Valentina Bianco (Fondazione Santa Lucia, Roma)

Hypnosis as a hypofrontality state: electrophysiological signs of reduced top-down control in a group of medium hypnotizable subjects

Rinaldo Livio Perri (Università Niccolò Cusano, Roma)

Does anxiety affect the motor and cognitive preparation?

Evidence from a decision-making task

Elena Mussini (Università Foro Italico, Roma)

SALA IMBARCADERO 1 / CASTELLO ESTENSE

13.30 - 15.30 **POSTER, SESSIONE 2**

Commissione Nadia Bolognini - Francesco Di Russo - Giacomo Koch - Simone Rossi

Colazione di lavoro

SALA ESTENSE

15.30 - 16.30 **LETTURA MAGISTRALE**

Empathic brain

Prof. Giacomo Rizzolatti (Università di Parma)

16.30 - 17.00 **ASSEMBLEA SOCI**

17.00 - 18.00 **SIMPOSIO**

An intracranial insight on sensori-motor awareness

Chair Pietro Avanzini - Giacomo Koch

The somatosensory perception through stereo-EEG: from tonic activity to awareness of touch

Pietro Avanzini (Consiglio Nazionale delle Ricerche, Parma)

Bistability and complexity within the sleeping brain: simultaneous stereo-EEG and high-density scalp EEG recordings

Andrea Pigorini (Università di Milano)

Direct electrical stimulation of the premotor cortex shuts down awareness of voluntary actions

Luca Fornia (Università di Milano)

SALA IMBARCADERO 1 / CASTELLO ESTENSE

18.30 - 18.45 **Premio SIPF Junior**

18.45 - 19.15 **Premio SIPF 2019**

19.15 *Cocktail*

Sabato 16 Novembre

SALA ESTENSE

09.00 - 10.00 **COMUNICAZIONI ORALI, SESSIONE 3**

Chair Francesco Di Russo - Giacomo Koch

10.00 - 11.00 **SIMPOSIO**

Cortical Spreading Depression: a biological model of perceptual and cognitive functional fluctuations and cortical sensory process plasticity

Chair Marina De Tommaso - Massimiliano Valeriani

Basic mechanisms of cortical spreading depression in animal and human models: from fluctuating phenomenon to cortical sensory plasticity
Prof.ssa Daniela Pietrobon, Senior Lecture (Università di Padova)

Mathematical modelling for cortical spreading depression on realistic MRI: dissecting the bioelectrical phenomenon from the eloquent effect
Luca Gerardo-Giorda (Basque Centre for Applied Mathematics-BCAM- Bilbao, Spagna)

Advanced visual network activation by trigeminal stimulation: a link between peripheral neurotransmitters and CSD generation
Antonio Russo di Sangiorgio (Università della Campania "Luigi Vanvitelli")

11.00 - 11.30 *Pausa caffè*

11.30 - 12.30 **SIMPOSIO**

Pain as a state of mind

Chair Massimiliano Valeriani - Tommaso Bocci

Physiological bases of placebo and nocebo effects
Mirta Fiorio (Università di Verona)

The Influence of Heart Rate Dynamics, EEG Oscillations and Personality Traits on Placebo Analgesia Responding
Vilfredo De Pascalis (Università di Roma "La Sapienza")

Migraine in children and adolescents: where trigeminal activation ends and suffering begins
Samuela Tarantino (Ospedale Pediatrico Bambino Gesù, Roma)

12.30 - 13.30 **SIMPOSIO**

Phantom Limb Syndrome: new advances

Chair Ferdinando Sartucci - Francesco Fattapposta

Clinical aspects and pathophysiology of Phantom Limb Syndrome
Giuliano De Carolis (Azienda Ospedaliera Universitaria Pisana, Pisa)

The instrumental assessment of pain in the Phantom Limb Syndrome
Massimiliano Valeriani (Ospedale Bambin Gesù, Roma)

Non-invasive neuromodulation: possible therapeutic applications
Tommaso Bocci (Università di Milano)

13.30 - 14.00 Premiazioni e saluti finali



COMUNICAZIONI ORALI
SESSIONE 1 - Giovedì 14 Novembre

- 1 Parietal tACS at beta frequency improves vision in a crowding regime
Luca Ronconi (Università San Raffaele di Milano)
- 2 Task-related concreteness effect in word processing: an ERP study
Maria Montefinese (Padova)
- 3 Decoding identity, but not familiarity, of imagined stimuli in early visual cortex
Flavio Ragni (CIMEC, Università di Trento)
- 4 ERP Correlates of the spatial attention cross-modal effects in an olfactory/visual Posner task
Sara Invitto (Università del Salento, Lecce)
- 5 You or me? Defining the boundaries of self-other peripersonal space
Carlotta Fossataro (Università di Torino)
- 6 Linking mental representation and neural patterns of emotion perception
Matteo Panormita (Università di Torino)
- 7 Probing the connection between facial mimicry and visual processing of emotional faces
Arianna Schiano Lomoriello (Università di Padova)
- 8 Vicarious pleasant touch and body representation in spinal cord injured individuals
Michele Scandola (Università di Verona)
- 9 Readout of kinematic information in autism experts
Novella Pretti (Università di Torino)
- 10 The speed race of transcallosal inhibition for bimanual coordination
Marta Bortoletto (IRCCS Centro San Giovanni di Dio Fatebenefratelli, Brescia)

COMUNICAZIONI ORALI
SESSIONE 2 - Venerdì 15 Novembre

- 1 Empathy draws on autobiographical memories
Federica Meconi (University of Birmingham, Regno Unito)
- 2 Through the looking glass: Hebbian learning shapes motor resonance
Giacomo Guidali (Università di Milano-Bicocca)
- 3 Contextual priors guide perception and motor responses to observed actions
Sonia Betti (Università di Udine)
- 4 Action anticipation and sounds' semantics
Mehrdad Bahadori (Università di Verona)
- 5 EEG decoding of cross-modal sensory predictions during task-irrelevant stimuli
Antonino Greco (Università di Trento)
- 6 The modulation effect of "arousal" on the motor preparation of speech in developmental stuttering
Pierpaolo Busan (Università di Trieste)

COMUNICAZIONI ORALI
SESSIONE 3 - Sabato 16 Novembre

- 1 Default or not default? Resting-state network connectivity correlates with learning success
Roberta Passiatore (Università di Bari)
- 2 Hemodynamic cortical and subcortical activity underlying human sleep Slow Waves
Monica Betta (Scuola IMT, Lucca)
- 3 Mismatch Negativity as a promising biomarker for schizophrenia
Tiziana Quarto (Università di Bari)
- 4 TMS-EEG: a promising tool to study the tDCS effects on cortical excitability
Erica Varoli (Università di Milano - Bicocca)
- 5 Distinct MEG functional connectivity and topology changes distinguish between voluntary hand and foot movements
Viviana Betti (Università "Sapienza" di Roma)
- 6 A study of parietal-motor connectivity by intraoperative dual cortical stimulation
Luigi Cattaneo (Università di Trento)

POSTER

SESSIONE 1 - Giovedì 14 Novembre

- 1 Modulation of corticospinal excitability during action observation in patients with consciousness-related disturbances
Marco Emanuele (Università di Ferrara)
- 2 Sensorimotor signatures in autism spectrum disorder: Biomarkers for early intervention?
Marco Emanuele (Università di Ferrara)
- 3 Motor cortical inhibition during concurrent action execution and observation
Elisa Dolfini (Università di Ferrara)
- 4 Visual perception is coupled to the ongoing dynamics of cortico-motor control
Alice Tomassini (Istituto Italiano di Tecnologia di Ferrara)
- 5 Different processes of Concurrent Motor Inhibition are active during Joint Action: Evidence from TMS study
Pasquale Cardellicchio (Istituto Italiano di Tecnologia di Ferrara)
- 6 Biological motion triggers dedicated action programming strategies: An interception paradigm
Francesco Torricelli (Università di Ferrara)
- 7 Group membership modulates motor resonance for fooled but not fooling actions
Marco Zanon (Università di Udine)
- 8 Investigating motor resonance for deceptive actions in real time interactions
Alessandra Finisguerra (IRCCS E. Medea di Prato)
- 9 Look at others' smile: Sensorimotor modulation of visual awareness
Thomas Quettier (Università di Padova)
- 10 Effects of music reading on motor cortex excitability in pianists: a transcranial magnetic stimulation study
Fabio Giovannelli (Università di Firenze)
- 11 Neural correlates of the relation between body ownership and agency: a tDCS study
Angela Marotta (CIMeC - Università di Trento, Rovereto)
- 12 Interaction between transitivity and meaning during action observation
Francesca Simonelli (Scuola IMT, Lucca)
- 13 Somatosensory evoked potentials recorded within the insula to median nerve stimulation
Stefano Pro (Ospedale Pediatrico Bambino Gesù di Roma)
- 14 Improving visuo-motor learning with cerebellar theta burst stimulation: behavioral and neurophysiological evidence
Maria Concetta Pellicciari (Fondazione Santa Lucia di Roma)
- 15 S1 effective connectivity modulation during touch perception and observation through the rubber Hand Illusion: a TMS-EEG experiment
Alberto Pisoni (Università di Milano Bicocca)

- 16 The Rubber Hand Illusion induces an up-regulation of visual detection
Alice Rossi Sebastiano (Università di Torino)
- 17 Multisensory integration effects in newborns: an EEG study
Irene Ronga (Università di Torino)
- 18 Sensitivity of human visual and somatomotor cortical regions to locomotion-compatible path curvature from the optic flow
Teresa Maltempo (Fondazione Santa Lucia di Roma)
- 19 Neural Bases Underlying the Integration of Visual and Proprioceptive Signals during Locomotion
Martina Bellagamba (Fondazione Santa Lucia di Roma)
- 20 Tracking phantom movements
Eugenio Scaliti (Università di Torino)
- 21 'Close to me': neural empathic reactions are reduced by physical distance and barriers between the observer and someone in pain
Chiara Cantoni (Università di Padova)
- 22 Embodied simulation in aesthetic experience: a TMS study
Francesca Fiori (Università di Milano-Bicocca)
- 23 Neural and kinematic dynamics of proactive and reactive control in interference resistance
Alessandra Tafuro (Università di Padova)
- 24 Understanding and maintaining in memory others' intentions
Eleonora Satta (Università di Trento)
- 25 Decoding reveals overlapping but not shared contents of action planning and motor imagery in the early visual cortex
Simona Monaco (Università di Trento)
- 26 Gaze direction modulates hand shaping during grasping actions towards haptically explored objects
Martina Pirruccio (Università di Verona)
- 27 The more I like it the more I remember it: aesthetic appreciation facilitates the memorization of musical intervals
Pietro Sarasso (Università di Torino)

POSTER

SESSIONE 2 - Venerdì 15 Novembre

- 1 Source analysis of Gamma-band activity after painful cutaneous laser stimuli in migraine patients and healthy controls
Katia Ricci (Università di Bari)
- 2 Can smell and taste modulate tonic pain? Preliminary results of a human behavioral study
Angela Sandri (Università di Verona)
- 3 Gamma eeg response during emotional film clip viewing in women with high vs low emotional dysregulation traits
Francesca Fusina (Università di Padova)
- 4 Non-conscious perception of emotional stimuli: a study on the variation of pupil size in conditions of sensory unawareness
Alessia Celeghin (Università di Torino)
- 5 Attentional avoidance of emotions in functional movement disorders
Angela Marotta (Università di Milano)
- 6 Connectivity of right temporo-parietal and frontal regions reflects dynamic properties of the emotional experience
Giada Lettieri (Scuola IMT, Lucca)
- 7 Cognitive impairment and event-related potentials in early multiple sclerosis: multimodal meg/eeg approach
Antonio Iaffaldano (Università di Bari)
- 8 Intervention of cognitive optimization in the elderly - the 28 year experience of Oficina da Memória in a public university of Brazil
Ana Clara Guerreiro Martins (Oficina da Memória, Rio de Janeiro, Brasile)
- 9 Heart and the brain: the role of heart rate variability in cognitive functions
Giuseppe Forte (Università di Roma "Sapienza")
- 10 The mediating role of heart rate variability in anxious people during change blindness task
Giuseppe Forte (Università di Roma "Sapienza")
- 11 The experience-dependent shaping of body gender perception
Giulia D Argenio (Università di Trieste)
- 12 "Experience dependent plasticity of auditory statistics: a computational approach"
Martina Berto (Scuola IMT, Lucca)
- 13 Investigating the role of auditory deprivation in shaping the mechanisms of repetition suppression and novelty detection in the visual system
Evgenia Bednaya (Scuola IMT, Lucca)
- 14 Saliency effect on visual change detection: face-like configurations modulate the N270 component
Mattia Galigani (Università di Torino)
- 15 The role of the primary visual cortex in perceptual awareness: a fast optical imaging study
Elisabetta Colombari (Università di Verona)

- 16 Probing the neural mechanisms for attentional capture, distractor suppression and their history contingent modulation by means of Transcranial Magnetic Stimulation (TMS)
Carlotta Lega (Università di Milano-Bicocca)
- 17 Change blindness in the parkinson disease
Stefania Mastropietro (Università di Roma "Sapienza")
- 18 Subclinical differences in pre-attentive psychophysiological mechanisms between children with High Functioning Autism and Intellectual High Potential
Stefano Pro (Ospedale Pediatrico Bambino Gesù di Roma)
- 19 Neurophysiological mechanisms of perceptual decision making: a MEG study
Laura Merzetti (Università di Chieti)
- 20 Integrity of corpus callosum is essential for the cross-hemispheric propagation of sleep slow waves: a high-density EEG study in split-brain patients
Giacomo Handjaras (Scuola IMT, Lucca)
- 21 Effects of cerebellar transcranial Direct Current Stimulation on inhibitory control: a Go/NoGo task
Daniela Mannarelli (Università "Sapienza" di Roma)
- 22 The human superior colliculus: a mri prospective
Matteo Diano (Università di Torino)
- 23 Pharmacological treatment and personality traits in addictive behaviours in parkinson disease
Stefania Mastropietro (Università di Roma "Sapienza")
- 24 Event related potentials in ADHD secondary to Tuberous Sclerosis Complex: a possible biomarker of symptoms severity?
Romina Moavero (Ospedale Pediatrico Bambino Gesù di Roma)
- 25 Endocannabinoid modulation of cortical dysfunction in Fronto-Temporal Disease patients: a clinical and neurophysiological study
Sonia Bonni (IRCCS Fondazione Santa Lucia di Roma)
- 26 The role of demographic and earthquake-related variables in Post-Traumatic Stress Disorder (PTSD). A research aiming at the Italian validation of the Harvard Trauma Questionnaire (HTQ)
Valentina Artoni (Università di Parma)
- 27 Nanotechnological device integrated with a protocol of postural exercises in patients with multiple sclerosis: a pilot study
Valerio Giustino (Università di Palermo)

CONSIGLIO DIRETTIVO

Presidente

Marina de Tommaso, *Università Aldo Moro di Bari*

Presidente eletto

Massimiliano Valeriani, *Ospedale Pediatrico Bambino Gesù, Roma*

Past President

Simone Rossi, *Università di Siena*

Vice - President

Giacomo Koch, *Policlinico Tor Vergata, IRCCS Fondazione Santa Lucia di Roma*

Segretario Scientifico -Tesoriere

Nadia Bolognini, *Università Milano-Bicocca*

Consiglieri

Francesca Garbarini, *Università di Torino*

Francesco Di Russo, *Università degli Studi di Roma "Foro Italico"*

Laila Craighero, *Università di Ferrara*

Viviana Betti, *Università di Roma La Sapienza*

Tommaso Bocci, *Università degli Studi di Milano, Ospedale San Paolo di Milano*

Revisori Dei Conti

Francesco Fattapposta, *Università di Roma La Sapienza*

ORGANIZZATORE LOCALE

Laila Craighero, *Università di Ferrara*

COMITATO SCIENTIFICO

MAURIZIO CORBETTA - *Università di Padova & Washington University, St. Louis (USA)*

VINCENZO DI LAZZARO - *Università Campus Bio-Medico di Roma*

CONCETTA MORRONE - *Università di Pisa & Istituto Stella Maris di Pisa*

COSTANZA PAPAGNO - *Università di Trento & Neuroscience Center Milano*

TOMMASO VECCHI - *Università di Pavia, & Brain Connectivity Center Pavia*



