



XXXIV CONGRESSO NAZIONALE **SIPF**

THE AGING BRAIN

NOTO **16-18 SETTEMBRE** 2026

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Carmelo M. Vicario, Università degli Studi di Messina

PROGRAMMA

16 SETTEMBRE

12.30–14.00 REGISTRAZIONE E INTRODUZIONE

14.00 – 15.15 SIMPOSIO 1 – AULA 1

NON-INVASIVE TRANSCRANIAL FOCUSED ULTRASOUND STIMULATION: FROM THE MECHANISMS OF INTERACTION TO THE APPLICATIONS FOR FUTURE TREATMENTS IN THE NEUROCOGNITIVE AND CLINICAL DOMAINS

Chairs: **Stella Petkovic**, Roma – **Federico Rossano**, Roma
Cosimo Urgesi, Roma–Udine

Non-invasive deep brain stimulation using focused ultrasound technologies
Davide Folloni, Siracusa

Causally investigating the role of deep brain structures in decision-making
and learning with TUS
Eleonora Carpino, Plymouth, UK

Multimodal Neuromodulation via Transcranial Focused Ultrasound and
Stimuli-Responsive Particle
Allegra Conti, Roma

14.00 – 15.15 SIMPOSIO 2 – AULA 2

FROM NEUROIMAGING TO GENOMICS AND WEARABLES: A PRECISION- AGEING APPROACH

Chairs: **Arianna Menardi**, Padova – **Giuseppe Giglia**, Palermo

From Pathology to Clinical Expression: Neuroimaging Insights on Cognitive
Reserve
Sabrina Bonarota, Roma

Advances in Neurodegenerative Genetics: Evolution and Challenges in
Understanding Alzheimer's Disease Heritability
Lia Talozzi, Parma

Buy grandpa and grandma a tablet – how technology can help monitor
and inform healthy and pathological ageing
Maria Laura Nasi, Padova

**15.15 – 16.30 COMUNICAZIONI ORALI – AULA 1
CLINICAL/NEUROLOGY/NEUROPSYCHOLOGY
Chairs:**

Neurometabolic Signatures of Alexithymia and Visuospatial Abilities in Parkinson's Disease: An Exploratory ¹H-MRS Study of the Substantia Nigra and Globus Pallidus

Laura Culicetto, Bonino Pulejo

Multilingualism is linked to delayed aging: Evidence from brain and biobehavioral clocks

Lucia Amoruso, San Sebastián, ES

Maintaining Overall Cognitive and physical functioning in at-risk older adults (MOVE): preliminary results from a randomized longitudinal trial

Caterina Dapor, Rovereto

A Randomized Sham-Control Trial for Home-Based Transcranial Alternating Current Stimulation (tACS) In Alzheimer's Disease

Lucia Mencarelli, Roma

Behavioural and electrophysiological correlates of tactile awareness in brain-damaged patients with tactile neglect

Alice Rossi Sebastiano, Torino

Dissociable Neural Mechanisms of Placebo Hypoalgesia: Implications for Executive Flexibility and Pain Modulation in Aging

Valeria Volpino, Torino

**15.15 – 16.30 COMUNICAZIONI ORALI – AULA 2
SENSORIMOTOR AND BODY
Chairs:**

Resting state functional connectivity and sensory attenuation in Functional Movement Disorders

Angela Marotta, Verona

Beyond remapping: Virtual Reality Prosthetic Training Reorganizes Cortical Functional Gradients in upper limb amputees

Cristina Perciballi, Roma

Temporal organisation of voluntary action phases within the cardiac cycle in active task

Aurelia Schirripa, Roma

Intrinsic constraints drive asymmetric plasticity across sensory cortices
Francesca Setti, Lucca

Parieto-frontal mechanisms process architectural transitions during dynamic spatial experience in virtual reality

Giovanni Vecchiato, Parma

Kinematics-informed latent space modelling reveals neural alignment during interpersonal coordination

Atesh Koul, Ferrara

16.30 – 17.00 BREAK

17.00 – 18.00 **KEYNOTE LECTURE – Teatro Comunale Tina di Lorenzo**

Chair: **Carmelo M. Vicario**, Messina

Born to Age: Environmental Exposures, Lifestyle, Nanoplastics, and the Lifelong Trajectory of Brain Aging

Roberto Ciccocioppo, Camerino

18.00 – 19.00 WELCOME COCKTAIL

17 SETTEMBRE

8.30 – 9.00 REGISTRAZIONE

9.00 – 10.15 SIMPOSIO 3 – AULA 1

QUANTITATIVE FRAMEWORKS FOR UNDERSTANDING HUMAN MOTOR BEHAVIOUR

Chairs: **Andrea Casarotto**, Genova – **Francesco Torricelli**, Genova
Mirta Fiorio, Verona

Analysing motor command organization through integrated muscle and kinematic synergies: A novel toolbox
Marta Russo, Roma

Quantifying motor distance to investigate variability and unveil individual fingerprints in human movement
Camilla Maronati, Torino

The impact of proprioceptive augmented virtual reality on movement imitation
Ambra Bisio, Genova

9.00 – 10.15 SIMPOSIO 4 – AULA 2

THE APERIODIC COMPONENT OF EEG: PROMISE, PITFALLS, AND PERSPECTIVES IN AGING AND NEUROPATHOLOGY

Chairs: **Fabio Masina**, Padova – **Marco Marino**, Padova
Marta Bortoletto, Brescia

Periodic and Aperiodic Electroencephalographic Rhythms During Vigilance Transitions in Alzheimer's Disease Mild Cognitive Impairment
Matteo Carpi, Roma

Aperiodic EEG Across Aging and Neurological Disorders: A Clinical Perspective
Sara Zago, Padova

Methodological Considerations on Spectral Features and Information Theory Measures
Daniele Marinazzo, Gand, BE

10.15–11.15 PREMIO SIFP 2026 – AULA 1

Chair: **Cosimo Urgesi**, Roma-Udine
Viviana Betti, Roma

11.15 – 11:45 COFFEE BREAK & SESSIONE POSTER 1

11.45 – 13.00 SIMPOSIO 5 – AULA 1

“WHOSE BODY IS IT?” BODILY SELF-DISTURBANCES ACROSS CLINICAL CONDITIONS

Chairs: **Carlotta Fossataro**, Torino – **Laura Zapparoli**, Milano
Francesca Garbarini, Torino

Bodily self-representation in borderline personality disorder: the role of dissociative symptoms
Marcella Romeo, Torino

Altered attenuation of self-generated bodily signals in Tourette syndrome
Giulia Stanco, Milano

When others shape the self: the social modulation of peripersonal space in schizophrenia
Francesca Ferroni, Parma

11.45 – 13.00 SIMPOSIO 6 – AULA 2

TEMPORAL PROCESSING IN THE AGING BRAIN: NETWORK DYNAMICS ACROSS HEALTH AND DISEASE

Chairs: **Antonio Criscuolo**, Maastricht, NL – **Valentina Bianco**, Pavia

Electrophysiological signature of explicit and implicit timing in young and older adults
Fiorella Del Popolo Cristaldi, Padova

Subcortical network dynamics in predictive timing: insights from neuromodulation and clinical models
Sara Terranova, Genova

Aging impacts encoding and prediction of temporal regularities in continuous auditory streams. What about interoceptive rhythms?
Antonio Criscuolo, Maastricht, NL

13.00 – 14:00 LUNCH & SESSIONE POSTER 1

14.00 – 15.15 COMUNICAZIONI ORALI – AULA 1
EMOTION AND SOCIAL
Chairs:

Neurosubtyping autism with naturalistic fMRI
Marco Pagani, Lucca

Phase-shift transcranial alternating current stimulation elicits dissociable oculomotor responses to conflict elicited by political stimuli in liberal and conservative samples
Biagio Dell'Omo, Roma

Preliminary voxel-based evidence of a relationship between disrupted cardiac interoception and dishonest behavior in patients with brain lesions
Giorgia Ponsi, Roma

Neural Signatures of Predictive Strategies Track Individual Differences Along the Autism-Schizophrenia Continuum
Luca Tarasi, Cesena

Context matters: EEG evidence for enhanced implicit recognition after an enriched museum visit
Giulia Anilia Gambaretti, Torino

Once a Criminal, Always a Criminal? Does Accusation Persistently Reduce Empathy Toward Individuals Accused of Violent Crimes?
Ludovica Vosa, Roma

14.00 – 15.15 COMUNICAZIONI ORALI – AULA 1
SENSORIMOTOR AND BODY
Chairs:

Kinesthesia: behavioural and electrocortical changes following a neuroplasticity-oriented sensory-motor cognitive intervention in older adults with and without mild cognitive impairment
Giuseppe Chiarenza, Zanzibar, TZ

Decoding Parametric Grip-Force Intensities from fMRI Data: A Time-Resolved Investigation of the Neuronal Underpinnings of Motor Planning
Guido Caccialupi, Berlino, DE

The emergence of hand-centered multisensory representations in early development
Barbara Italia, Torino

Shared Neural Codes for Touch and Vision of the bodily self: Evidence from fMRI Inter-Subject Correlation
Nicolò Castellani, Torino

The motor placebo effect modulates premovement preparation and pre-stimulus attention without altering stimulus anticipation: evidence from EEG
Miriam Braga, Verona

Architectural experience shapes the motor coding of multisensory space: behavioral and TMS evidence
Giorgia Guerra Frey, Parma

15.15 – 16.15 KEYNOTE LECTURE – AULA 1

Chair: **Alessandro D'Ausilio**, Ferrara

Functional organization of the superior parietal lobule in human and non-human primates
Patrizia Fattori, Bologna

16.15 – 16.45 COFFEE BREAK & SESSIONE POSTER 1

16.45 – 18.00 SIMPOSIO 7 – AULA 1

FROM PRIMATE AREA 46 TO HUMAN PREFRONTAL GATING: NEURAL MECHANISMS AND CLINICAL IMPLICATIONS

Chairs: **Maria Del Vecchio**, Parma – **Maddalena Fabbri Destro**, Parma
Alessandro D'Ausilio, Ferrara

Functional segregation of visual and goal encoding in the macaque prefrontal cortex
Claudio Basile, Parma

Network Connectivity Supports Behavioral Relevance Coding in Human Area 46 Prior to Selective Motor Activation
Simone Del Sorbo, Camerino

Attention-Deficit/Hyperactivity disorders across the lifespan: implication in action control
Antonio Narzisi, Pisa

16.45 – 18.00 SIMPOSIO 8 – AULA 2

AESTHETIC EXPERIENCE AND EMOTIONAL-COGNITIVE DYNAMICS IN AGING: A TRANSLATIONAL VIEW FROM LABORATORY PARADIGMS TO IMMERSIVE EXPERIENCES

Chairs: **Clemente Livio**, Bari – **Marina de Tommaso**, Bari
Fabio Giovannelli, Firenze

Neurophysiological correlates of emotional-cognitive integration in healthy aging

Madia Marika Biasi, Foggia

An aesthetic audiovisual immersion for stimulating the ageing brain and contrasting apathy and anxiety – A combined Virtual Reality and Electroencephalography study

Elvira Brattico, Bari

Aesthetic Evaluation in Older Adults with Mild Cognitive Difficulties: Cognitive Profiles and EEG/fNIRS Network Organization

Clemente Livio, Bari

18.00–18.30 PREMIO SIPF JUNIOR E PREMIO SIPF-ITRN – AULA 1

18.30–19.30 ASSEMBLEA SOCI SIPF – AULA 1

20.00 CENA SOCIALE

18 SETTEMBRE

8.30 – 9.00 REGISTRAZIONE

9.00 – 10.15 SIMPOSIO 9 – AULA 1

EEG DYNAMICS ALONG THE AGING CONTINUUM: OSCILLATIONS, APERIODIC ACTIVITY, AND SIGNAL COMPLEXITY

Chairs: **Andreina Giustiniani**, Messina – **Nadia Bolognini**, Milano

Aging redirects prior expectations from perception to action

Vincenzo Romei, Cesena

Aperiodic activity in neurophysiological signals from healthy aging to disease progression

Salvatore Bertino, Messina

Resting-state EEG spectral and fractal features in dementia with Lewy bodies

Antonino Vallesi, Padova

9.00 – 10.15 SIMPOSIO 10 – AULA 2

THE INSIDE AND THE OUTSIDE OF SOCIAL MOTOR INTERACTIONS

Chairs: **Matteo Candidi**, Roma – **Valentina Bianco**, Pavia

The role of internal bodily signals in interpersonal motor interactions

Vanessa Era, Roma

The neural dynamics of sensorimotor information exchange in joint action

Lucia Maria Sacheli, Milano

The Interactive 'Social Brain': Behavioral and Neural Substrates for the Processing of Potential Engagement in Motor Interactions Neural selectivity for social interactions in the infant brain

Edoardo Arcuri, Parma

10.15 – 11.15 KEYNOTE LECTURE – AULA 1

Chair: **Ambra Bisio**, Genova

Time of Day Effects on Motor Learning

CHARALAMBOS PAPAXANTHIS, Bourgogne, FR

11.15 – 11:45 COFFEE BREAK & SESSIONE POSTER 2

11.45 – 13.00 SIMPOSIO 11 – AULA 1
OPTIMIZING TRANSCRANIAL MAGNETIC STIMULATION (TMS) ADMINISTRATION TO REDUCE OUTCOMES VARIABILITY AND IMPROVE ITS EFFECTIVENESS: EVIDENCE FROM TMS-EEG STUDIES

Chairs: **Giacomo Guidali**, Milano – **Delia Lucarelli**, Chieti
Marta Bortoletto, Brescia

Leveraging TMS pulse waveform and E-field direction for selective targeting of functional networks
Delia Lucarelli, Chieti

Temporal signatures of TEPs reveal stimulation sites via multi-coil TMS and machine-learning
Giulia Pieramico, Chieti

Toward reducing inter-trial variability in TMS-EEG via task-dependent network brain-state control and tractography-guided parameter optimization
Arianna Brancaccio, Trento

11.45 – 13.00 SIMPOSIO 12 – AULA 2
INVESTIGATING THE NEURAL BASES OF MEMORY TRAINING IN THE AGING BRAIN: PROMISES AND CHALLENGES

Chairs: **Carlo Sestieri**, Chieti – **Giuseppe Giglia**, Palermo

Neural Correlates of Method of Loci Training: Connectivity Changes Associated With Learning Success in Aging
Raquel Lezama, Chieti

Retrieval practice turns past memory errors into gains for new learning across age
María J. Maraver, Jaén, ES

Working memory training-related changes in frontal and parietal theta and alpha power in older and younger adults within the framework of the STAC-R model and the CRUNCH hypothesis
Ludmiła Zajac-Lamparska, Bydgoszcz, PL

13.00 – 14.00 PRANZO & SESSIONE POSTER 2

14.00 – 15.15 COMUNICAZIONI ORALI – AULA 1
NEUROPHYSIOLOGY

Chairs:

Prestimulus oscillations shape cortical excitability: evidence from i-TRP
Teresa Ramundo, Lucca

Frequency-specific coupling of cerebellar TBS and tACS shapes motor cortical plasticity and response variability
Katia Botta, Ferrara

Hemifield lateralized induction of associative plasticity in the primary visual cortex through non-invasive brain stimulation
Francesca Crespi, Milano

Unveiling the spatio-temporal fingerprint of cortical excitability modulation driven by action observation: a TMS-EEG study
Antonella Mancuso, Parma

Driving human motor cortex plasticity through Visuomotor Paired Associative Stimulation and Action Observation
Laura Ferrari, Parma

Cortical instability and network rigidity: high-gamma power and frontal alpha coherence as integrated biomarkers of cognitive decline
Giorgia Francesca Scaramuzzi, Bari

14.00 – 15.15 COMUNICAZIONI ORALI – AULA 2
COGNITION

Chairs:

Be-Flex: Neurobehavioral Correlates of Cognitive Flexibility
Domenico Ramanazzi, Cesena

Functional Connectivity as a Bridge Between Brain Age and Cognition: a Multimodal Aging Framework
Annachiara Crocetta, Torino

When choice pays off: Reward processing in intentional decision-making – an fMRI study
Tommaso Berni, Milano

Object Shape Discrimination in the Dorsal Visual Stream: A Tractography-Driven ccPAS
Elena Bertacco, Verona

Enhancing Performance Monitoring Abilities in Parkinson's Disease through Transcranial Alternating Current Stimulation

Angela Marotta, Verona

Neural and Behavioral Correlates of Financial Decision-Making in Healthy Aging

Valentina Pacella, Bordeaux, FR

15.15 – 16.30 SIMPOSIO 13 – AULA 1

NEW FRONTIERS IN THE TREATMENT OF CHRONIC PAIN

Chairs: **Leonor J Romero Lauro**, Milano – **Angelo Quartarone**, Messina

Nadia Bolognini, Milano

Magnetic Resonance-guided Focused Ultrasound (MRgFUS) for neuropathic Pain: Clinical Efficacy, Neuropsychological and Advanced MRI Outcomes

Silvia Marino, Messina

Feel the Groove, Reduce the Pain: Corticospinal Modulation During Music Listening

Giuseppe Giglia, Palermo

Assessing The Effects Of Personalized High-Definition Transcranial Direct Current Stimulation For Chronic Pain Treatment: Preliminary Results

Gaia Locatelli & Giada D'Este, Pavia

15.15 – 16.30 SIMPOSIO 14 – AULA 2

NEUROPLASTICITY AND NEUROMODULATION IN NEURODEVELOPMENTAL DISORDERS: FROM BIOMARKERS TO REHABILITATIVE INTERVENTIONS

Chairs: **Viola Oldrati**, Bosisio Parini-Lecco – **Niccolò Butti**, Bosisio Parini, Lecco

Fabio Giovannelli, Firenze

Large-scale brain signatures in Epilepsy: bridging neurophysiology and clinical phenotype

Gian Marco Duma, Bosisio Parini-Lecco

Cerebellar synchronization via EEG-guided HD-tACS and Virtual Reality: an innovative approach for social prediction rehabilitation in congenital cerebellar malformations

Andrea Ciricugno, Pavia

Transcranial Direct Current Stimulation in neurogenetic disorders: emerging treatment perspectives for Down Syndrome

Floriana Costanzo, Roma

16.30–17.00 PREMIO MIGLIOR CONTRIBUTO SCIENTIFICO – AULA 1

17.00 – 17.30 COFFEE BREAK & SESSIONE POSTER 2

17.30 CHIUSURA DEI LAVORI

17.40 COMPILAZIONE QUESTIONARIO ECM

INFORMAZIONI GENERALI

RAZIONALE

Il tema del XXXIV Congresso Nazionale SIPF 2026, "The Aging Brain", pone al centro la complessità dell'invecchiamento cerebrale, un processo segnato da cambiamenti fisiologici ma anche da notevoli capacità di adattamento. L'invecchiamento non segue un'unica traiettoria: alcuni individui mantengono funzioni cognitive e benessere emotivo elevati, mentre altri sviluppano vulnerabilità che possono evolvere in declino patologico. Una componente decisiva nella differenziazione tra invecchiamento sano e patologico riguarda l'impatto dei rischi ambientali, sempre più riconosciuti come determinanti neurobiologici. Inquinanti atmosferici, micro- e nano-plastiche, esposizioni tossiche, dieta ipercalorica/cibi ultraprocesati, abuso di alcol e tabacco, sedentarietà e stress cronico influenzano la neuroinfiammazione, il metabolismo cerebrale e la stabilità delle reti neurali, contribuendo ad anticipare o amplificare processi degenerativi. Al contrario, ambienti stimolanti, relazioni sociali attive, attività motoria e stili di vita/dieta equilibrati favoriscono resilienza e healthy aging. In questo scenario, il Congresso Nazionale SIPF 2026 intende creare un dialogo interdisciplinare tra neuroscienze, psicologia, biologia, medicina, e scienze sociali per comprendere come fattori biologici, comportamentali e ambientali si intreccino nel modellare la salute cerebrale lungo l'arco della vita. Attraverso sessioni tematiche dedicate, esploreremo i meccanismi dell'invecchiamento, le strategie di prevenzione e le innovazioni utili a sostenere un cervello in salute in una società che invecchia.

SEDE DEL CONGRESSO

Aula Conferenze (Aula Genovesi) - Aula Magna (Aula Giavanti)
C.U.M.O. Consorzio Universitario Mediterraneo Orientale
Palazzo della Cultura Carlo
Via Giavanti, 96017 Noto SR

ISCRIZIONE

La pre-iscrizione si effettuerà online tramite il sito web www.sipf.it
Si ricorda che per partecipare ai lavori è assolutamente necessario risultare preventivamente iscritti al congresso. Coloro che risulteranno correttamente iscritti all'evento, riceveranno e-mail di conferma. L'iscrizione al congresso dà diritto alla partecipazione ai lavori, al materiale congressuale, all'attestato di partecipazione e alle consumazioni servite in sede congressuale.

Tipologia Iscrizione	Entro 17-07-26	Entro 1-09-26	On site
Socio Ordinario	€ 300	€ 350	€ 450
Socio under 35	€ 200	€ 230	€ 350
Non Socio	€ 440	€ 470	€ 500
Non Socio under 35	€ 270	€ 300	€ 450
One day*	€ 170	€ 200	€ 220
Studenti/PHD universitari**	€ 170	€ 200	€ 220

RESPONSABILE SCIENTIFICO

Cosimo Urgesi

ECM CONGRESSO

Provider n. 1802 – Evento in fase di accreditamento

CREDITI FORMATIVI

Si ricorda che per poter ottenere i crediti formativi la presenza minima all'evento deve essere del 90% delle ore formative totali; si ricorda inoltre che il superamento del quiz ECM si ottiene con il 75% di risposte valide.

BADGE

I badge dovranno essere ritirati presso la segreteria congressuale che sarà aperta 30 minuti prima dell'inizio dell'evento. Si raccomanda ai partecipanti di indossare il proprio badge durante tutta la durata dei lavori.

ATTESTATO

L'attestato di partecipazione sarà scaricabile tramite il QR CODE che sarà disponibile in segreteria alla fine dei lavori.

ASSICURAZIONE

La partecipazione all'evento non implica alcuna responsabilità da parte della segreteria scientifica e organizzativa per qualsivoglia incidente, danni personali o materiali o furti subiti dal partecipante durante la manifestazione.

RINGRAZIAMENTI

CON IL PATROCINIO DI



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