PROGRAM 2024

Annual Meeting of the NeuroMod Institute, Antibes

WEDNESDAY JULY 3, 2024

9:15 – 10:00	**Registration and welcome**
10:00 – 10:15	**Opening and Introduction** *Theodore PAPADOPOULO*
10:15 – 11:00	**Keynote lecture**: Non-differentiable activity in the brain. *Shigeru SHINOMOTO*
11:00 – 11:30	The Strong Lottery Ticket Hypothesis: A useful analogy of synaptic pruning? *Davide FERRE*
11:30 – 12:00	A neural field model for ignition and propagation of cortical spreading depression. *Emre BASPINAR*
12:00 – 12:30	Shared cerebral bases for the recognition of visual and auditory information in the SPoARC effect. *Maëliss VIVION*
12:30 – 14:00	**Lunch**
14:00 – 14:30	Different control schemes underlying the behaviour of population of motor units from two lower limb muscles. *François DERNONCOURT*
14:30 – 15:00	Prior spatial knowledge influences the processing of navigationnal affordances and early electrophysiological markers of scene perception. *Clément NAVEILHAN*
15:00 – 16:30	**Poster session (discussions with coffee)** – Speech-based Biomarkers of Cognitive Function Are Associated with Gold-Standard Neurocognitive Evaluations in an Early-Stage AD Population. *Zampeta-Sofia ALEXOPOULOY* – Baking Lies into Linguistic Pies: An Investigation of Language and Deception in French. *Charlotte BADOC & Emilie TAVERNIER* – Interaction Between Giftedness and Attention Deficit Hyperactivity Disorder. *Farah BEN MINOUN* – Enhancing Motor Imagery BCI classification with Block-Toeplitz Augmented Covariance Matrices and Siegel metric. *Igor CARRARA* – Linking Acoustic Markers to Neuromodulation in Neurodegenerative Diseases: Insights from a Systematic Review of non-Invasive Brain Stimulation Interventions. *Eloise DA CUNHA* – The effect of common parameters of bipolar stimulation on brain evoked potentials. *Petru ISAN* – Developing a Machine Learning Model for Optical Flow Estimation using Simulated Retinal Waves. *Christos KYRIAZIS* – The diagnostic value of the central vein sign in Radiologically Isolated Syndrome. *Cassandre LANDES-CHATEAU* – The use of microstates to unravel cognitive processes underlying language production for trials with variable durations. *Emeline MANKA*

	– Sharp as a tack: assessing the role of iconic mappings in cognitive processes underlying word production. *Giulio MASSARI* – Scene-selective regions encode the vertical position of navigationally relevant information in young and older adulthood. *Stephen RAMANOËL* – Analysis and modification of functional connectivity in neural organoids. *Gregorio REBECCHI* – Embedded multimodal continual learning for robust autonomous systems. *Laurent RODRIGUEZ* – Investigating neural correlates of the perspective taking combining mobile EEG and virtual reality. *Maud SAULAY-CARRET*
16:30 – 17:15	**Keynote lecture:** Investigating semantics above and beyond language: a clinical and cognitive neuroscience approach. *Valentina BORGHESANI*
17:15 – 17:45	Functional consequences of interaction between network connectivity, and structure in continuous input. *Peter-Ford DOMINEY*
20:00	**Evening Reception**

THURSDAY JULY 4, 2024

7:30 – 9:00	**Breakfast**
9:00 – 09:45	**Keynote lecture:** Are brain function and structure connected? *Samuel DESLAURIERS-GAUTHIER*
09:45 – 10:15	A retino-cortical model of anticipation. *Jerôme EMONET*
10:15 – 10:45	Assessing verb retrieval in Urdu-speaking people with aphasia: a spontaneous speech analysis. *Ayesha AREEJ*
10:45 – 11:00	**Coffee break**
11:00 – 11:30	Characterizing dynamic functional connectivity subnetwork contributions in narrative classification with Shapley values. *Aurora ROSSI*
11:30 – 12:00	How people learn complexity? An experiment on the Dirty Face problem. *Michela CHESSA, Agnès FESTRE, Kübra SIMSEK*
12:00 – 12:30	CHANI: Correlation-based Hawkes Aggregation of Neurons with bio-Inspiration. *Sophie JAFFARD*
12:30 – 14:00	**Lunch**
14:00 – 14:45	**Keynote lecture:** Brain aging: cellular basis of memory. *Paula POUSINHA*
14:45 – 15:15	Brain circuits for memory update. *Bianca SILVA*
15:15 – 15:45	A photoswitchable inhibitor of TREK channels controls pain in wild-type intact freely moving animals. *Guillaume SANDOZ*

15:45 – 16:15	Longitudinal automated video-tracking of mice living in group unveils atypical patterns of spontaneous social behaviors triggered by microbiota-derived metabolites implicated in autism. *Laetitia DAVIDOVIC*
16:15 – 17:45	**Poster session (discussions with coffee)** – Graph Matching of Structural and Functional Brain Networks. *Yanis AESCHLIMANN* – Activity estimation via distributed measurements in an orientation sensitive neural fields model of the visual cortex. *Adel ANNABI* – I-Spin live: An open-source software based on blind-source separation for real-time decoding of motor unit activity in humans. *Simon AVRILLON* – Robust Graph-based analysis for functional brain connectivity. *Arturo CABRERA-VAZQUEZ* – An open-source tool for whole-brain analysis reveals fundamental differences between immediate early genes cFos, Arc and NPAS4. *Carlo CASTOLDI* – Longitudinal automated videotracking of mice living in group unveils atypical patterns of spontaneous social behaviors triggered by microbiota-derived metabolites implicated in autism. *Khanna CHISTIAKOVA* – Tracing Pronouns in the Brain: a MEG study in French. *Mar CORDERO-RULL* – Cognitive factors associated with successful cochlear implant placement in adults with post linguistic deafness three months after placement: integrative modelling of interindividual variance. *Cordélia FAUVET* – Verbs by effort: a new approach to model words' semantics. *Raphaël FARGIER* – The Role of Visualisability and Verbalisability in Analogical Mapping Processes. *Jad KHATTABI* – Estimating Agent's Learning Behavior in Problem-Solving Environments. *Louis KÖHLER* – Local optimization rule drives a learning network toward a grokking phase transition. *Lionel GIL* – Modeling of the stimulation artefact during brain direct electrical stimulation. *Emeline MANKA* – Can Linear-Nonlinear Models capture simple forms of retinal adaptation? *Laura PIOVANO*
18:00	**Bus-shuttle to Antibes Train Station**