

PROGRAM

Annual Meeting of the NeuroMod Institute, Antibes 30th June – 1st July 2022

30th June

9:00 – 10:30	Registration and welcome
10:30 – 11:40	Opening and introduction
10:30 – 11:00	Presentation of the NeuroMod Institute: <i>Alexandre MUZY, Director of NeuroMod</i>
11:00 – 11:30	Opening remarks <i>Sylvain ANTONIOTTI (Vice-President Idex, Université Côte d'Azur)</i> <i>Stéphane DESCOMBES (Director of the « Maison de la Modélisation, de la Simulation et des Interactions » (MSI), Université Côte d'Azur)</i> <i>Clara HERER (Déléguée régionale of the CNRS)</i>
11:30 – 11:40	Program introduction: <i>Valeria MANERA, for the organizing committee</i>
	TOPIC: Modeling of language, cognition, and behavior Moderators: <i>Valeria MANERA, Tobias SCHEER</i>
11:40 – 12:20	Keynote lecture: Investigating the dynamics of language processes at multiple scales: A neuro-psycho-linguistic approach. <i>Raphaël FARGIER</i>
12:20 – 13:30	Lunch
13:30 – 14:20	Oral presentations
13:30 – 13:55	Can linguistic experience influence individual and group decision-making strategies? <i>Mikhail ORDIN</i>
13:55 – 14:20	Sleep-dependent memory consolidation - is it time for a revision? <i>Dezso NEMETH</i>
14:20 – 15:50	Poster session (presentations and discussion) – How do we know whether we are talking about a friend or bread? Recognizing words without context by skilled French speakers vs. dyslexic adults. <i>Maria Mar CORDERO-RULL</i>



- Etude des relations réciproques entre quantité/qualité du sommeil et capacités socio-cognitives chez l'adulte en population générale (SleepSoCog). *Damien VISTOLI, Emilie GERBIER*
- Decision making: Exploration-Exploitation trade-off in cognitive impairment and apathy. *Lyne DAUMAS, Isabel JUNQUERA BADILLA*
- Assessing difficulties in making choices in apathetic subjects using the "Choisis!" game: a pilot study. *Claudia PARTOS*
- A pilot study on the putative effects of oligo metal dietary supplements on voice parameters and some physiological and psychological parameters related to stress. *Maxime SOULA, Alice GUYON*
- Sport-related Concussion: short and long-term impact on brain. *Victor PEROT, Renaud DAVID*

15:50 – 16:05

Coffee break

16:05 – 16:45

Keynote lecture: Phonological asymmetries in language processing.

Aditi LAHIRI

16:45 – 17:35

Oral presentations

16:45 – 17:10

The neuroscientific and clinical challenges of apathy and motivated behavior: what role for data modeling? *Valeria MANERA*

17:10 – 17:35

Olfactory stimulation for the treatment of apathy in neurodegenerative disorders. *Jérémie TOPIN, Renaud DAVID*

20:00

Evening Reception

1st July

7:30 – 9:00

Breakfast

9:00 – 9:20

Opening remarks

Charles BOUYEYRON (Director of the 3IA Institute)

Maureen CLERC (Director of Inria Center Sophia-Antipolis Méditerranée)

TOPIC: Modeling of neural networks, EEG and MRI

Moderators: *Bruno CESSAC, Massimo MANTEGAZZA*

9:30 – 10:10

Keynote lecture: Balance of excitation and inhibition and robust high-capacity memory networks. *Gianluigi MONGILLO*



10:10 – 12:00

Oral presentations

10:10 – 10:35

On the use of augmented autocorrelation matrix for the classification of BCI-EEG.
Igor CARRARA

10:35 – 11:00

Cointegration analysis of EEG signals. *Marie LEVAKOVA*

11:00 – 11:10

Coffee Break

11:10 – 11:35

Dynamic branching of sequences for probabilistic prediction: A neural network model and behavioral experiment. *Frédéric LAVIGNE, Pascal CHOSSAT*

11:35 – 12:00

Local equations for a large interacting sparse neural network.
Nicolas VATTUONE

12:00 – 12:25

Impact of couplings on the collective dynamics of a network of excitable optical nodes. *Stephane BARLAND*

12:25 – 14:00

Lunch

14:00 – 16:00

Poster session (presentations)

- Axonal Delay Learning: from biology to computational neuroscience.
Amélie GRUEL
- The role of dynamic inhibitory synapses for coding surprise in the retina.
Simone EBERT, Bruno CESSAC
- A stochastic model of hippocampal synaptic plasticity with geometrical readout of enzyme dynamics. *Romain VELTZ*
- Hyperbolic Model Captures Temporal Small Worldness of Brain Dynamics.
Aurora ROSSI
- Non-zero phase delays in the alpha frequency band along the antero-posterior axis in an Eyes Closed condition. *Côme Le BRETON*
- Use of a random forest classifier to automatically detect spikes on mice ECoG recordings. *Fabrice DUPRAT*
- Structural Brain Graph Matching to Infer Parcellation Robustness. *Anna CALISSANO*
- Characterization of Brain T2 Lesions Suggestive of Demyelination in Asymptomatic Patients: The Radiologically Isolated Syndrome Cohort.
Cassandra LANDES-CHATEAU
- Rotation invariant features for Alzheimer's disease identification using convolutional neural networks. *Aymene Mohammed BOUAYED*
- A revisiting of Structure Function Mapping using Graph Convolutional Networks. *Sarah MOUFFOK*
- Involvement of ASIC1a channels in the spinal processing of pain information by deep projection neurons. *Romain VELTZ*



16:00 – 16:10

Coffee Break

16:10 – 16:40

Poster session (discussion)

16:40 – 16:50

Conclusions and closing. *Alexandre MUZY*