

WEB

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B3LAB Newsletter N° 7

July-August 2023



Dear B-cubici,

welcome back!

In this issue we look back at all the news from July and August.

Have a nice September!



News

Congratulations to Davide Coluzzi on the defense of his doctoral thesis.

Elena Bondi received the “Ermenegildo Zegna founder’s scholarship” to spend a visiting period at the Carnegie Mellon University, Pittsburgh, USAO.

The paper entitled “*Effects of Varying k in Lk Norm Similarity Measures on a Reinforcement Learning-Based Clinical Decision Support System*” submitted by **Cristian Drudi, Maximiliano Mollura and Riccardo Barbieri** has been awarded as best paper at IEEE EUROCON 2023, July 6-8, Turin, Italy.

Federica Goffi won the excellence award @ ECNP 2023 with the abstract entitede “Dynamic functional connectivity of the central autonomic network in major depressive disorder”.

Frontiere

Viaggio nel mondo della ricerca

Anna Corti has been interviewed by **Frontiere (@POLIMI)**. You can find the article here [Prevedere il rischio cardiovascolare dei pazienti grazie a modelli computazionali - Frontiere - Politecnico di Milano \(polimi.it\)](#)

Marta Carrara, was interviewed for **#meetourRESEARCHERS** news of the Department of Electronics, Information and Bioengineering, Politecnico di Milano. Here the link to the post:

<https://www.linkedin.com/feed/hashtag/?keywords=meetourresearchers>

The project “*Brain-environment digital twin models for predictive stratification of bipolar disorder (BRAINTWIN)*”, coordinated by **Eleonora Maggioni** has been selected for the **PRIN 2022 PNRR** funding

Events



Publications

Bordin V, Pirastru A, Bergsland N, Cazzoli M, Baselli G, Baglio F. Optimal echo times for quantitative susceptibility mapping: A test-retest study on basal ganglia and subcortical brain nuclei. *Neuroimage*. 2023 Jul 10;278:120272. doi: 10.1016/j.neuroimage.2023.120272. Epub ahead of print. PMID: 37437701.

A. Calcagno, S. Coelli, C. Amendola, I. Pirovao,... and A.M. Bianchi. "Role of the EEG theta network during software production: a connectivity study," in *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, doi: 10.1109/TNSRE.2023.3299834.

E. Spairani, G. Steyde, S. Tagliaferri, M. G. Signorini, G. Magenes, "Fetal states identification in cardiotocographic tracings through discrete emissions multivariate hidden Markov models" *Computer Methods and Programs in Biomedicine*, 2023, <https://doi.org/10.1016/j.cmpb.2023.107736>

Davide Coluzzi and **Giuseppe Baselli**. "Diffuse and Localized Functional dysconnectivity in Schizophrenia: a Bootstrapped Top-Down Approach." *Fundamenta Informaticae* 189.2 (2022): 171-198.

Bonilauri, A., Pirastru, A., ... Baselli G. & Baglio, F. (2023). Surface-based Integration Approach for fNIRS-fMRI Reliability Assessment. *Journal of Neuroscience Methods*, 109952. <https://doi.org/10.1016/j.jneumeth.2023.109952>

Reminder

***** Volunteers *****

Andrea cerca per due esperimenti: acquisizione segnale EEG durante task di immaginazione delle parole (serve una sufficiente conoscenza dell'italiano e della pronuncia per partecipare); acquisizione segnale EEG in protocollo di stimolazione di emozioni in ambiente monitor e Visore per Realtà Virtuale. Per gli interessati contattare: andrea.farabbi@polimi.it

"l'Istituto di Ricerche Farmacologiche Mario Negri IRCCS sta promuovendo un'indagine sulla conoscenza e sull'attitudine dei cittadini rispetto alla condivisione dei propri dati clinici. Vi chiediamo 5 minuti per rispondere a qualche domanda su questo tema. L'indagine è in forma anonima.

Grazie per il tempo che vorrete dedicarci e non dimenticate di diffondere questo messaggio." Link: <https://opinionibanchedati.marionegri.it/>

*****Research Topic open*****

Frontiers in Neuroergonomics is currently hosting the following Research Topic with **Eleonora Maggioni** and Prof. Mendez as topic editors, coordinated by **Stefania Coelli**:

<https://www.frontiersin.org/research-topics/48939/stress-and-the-brain-advances-in-neurophysiological-measures-for-mental-stress-detection-and-reducti>

*****Software*****

SPIDER-NET (Software Package Ideal for Deriving Enhanced Representations of brain NETworks) . You can find SPIDER-NET here : <https://caditer.dongocchi.it/spidernet/>

The B3Lab GitHub repository is online to promote collaboration and code_reuse among us: <https://github.com/b3lab-polimi> ! Can't wait to become part of our community? Just send a request to pierluigi.reali@polimi.it , specifying the email address connected to your GitHub account

*****Website*****

Do you have *Master's thesis proposals* but don't know how to advertise them effectively? You can count on the B3lab's website! 😊 We are looking for abstracts like this one to work on the new layout of the dedicated website section (https://www.b3lab.deib.polimi.it/?page_id=1176) and try out different strategies to increase its visibility on social networks. The proposal does not have to be much elaborate: as long as you provide a title, a track, and one or more contacts, you are good. If you wish to contribute, please, send your abstract as a Word document to pierluigi.reali@polimi.it. Having at least one proposal from each of our different macro-areas (signals, images, bioinformatics, and e-health) would be great as a start!

