

WEB

<https://www.b3lab.deib.polimi.it/>

B3LAB Newsletter N° 9

October 2023



Dear B-cubici,

The group is growing with new fresh PhD students!

If anyone is missing from the B3LAB mailing list, please contact

stefania.coelli@polimi.it!

CHEERS

News

The proposal MONIMEDS (MONitoring MEDical Devices for higher patients' Safety) by **Enrico Caiani**, Riccardo Gibello, Antonella Lombardi and **Yijun Ren** is the winner of the **Start Cup Regione Lombardia 2023** - category ICT& Services, being awarded with 25000 € prize and the inclusion in the Start Cup National Competition (**finals 30/11-1/12 in Milan**)!

Moreover, the same proposal is also competing in the Switch2Product 2023, as one of the top 45 at this stage.



Edoardo won first prize for the best graphical abstract at the METROXRaine 2023 conference with the paper entitled: *'Exploring Emotional Responses in Virtual Reality Through Skin Conductance Signal'*.

Prof. Caiani has been at the University of Illinois at Chicago (USA) on 20/10/23 to deliver an invited talk on "Biomedical research for space physiology: from Earth to Space and viceversa". He also received the Top Reviewer Award from the European Heart Journal-Digital Health for 2022/23

Prof. Giuseppe Baselli has been invited as speaker by RICAM, the Johann Radon Institute for Computational and Applied Mathematics of the Austrian Academy of Science (<https://www.oeaw.ac.at/ricam/>) Workshop on the use of ML and AI techniques in medical applications, 4-8 DEC 2023, Linz, Austria
<https://www.oeaw.ac.at/ricam/news-events/specsem>



Prof. Anna M Bianchi has been the Keynote Speaker at the RECPAD 23, 29th Portuguese Conference on Pattern Recognition

Events

We will present Thesis topic to last year Biomedical Engineering Master students B.I.F. Team (Data, Signal and Image Analysis)

Prof. E. Caiani: **Wednesday 8th, Nov. alle 18:00** (ONLINE in his Webex Room)

All the others: **Thursday 9th, Nov. 17.30, Room 9.1.2**

Conference

The 4-page work "A data-driven method to perform Personas Validation using Clustering consensus metric" from **Tauro E**, Gorini A, Bilo G, **Caiani EG** has been accepted for presentation in the 11th edition of the IEEE International Conference on e-Health and Bioengineering (EHB), 9-10/11/23, Bucharest

Prof. Caiani has been invited as speaker in Space Medicine panel discussion on "Mission to the Moon: Artemis Health Implications", Seds Italy Space Conference 2023, Università del Piemonte, Novara, 27/10/23

Sarah Solbiati participated to the International Astronautic Conference in Baku, Azerbaijan to present her work on "Long-term analysis of electro-mechanical activity during the two analog lunar missions EMMPOL 10 and EMMPOL 11".



*Sarah as crew member in a trial isolation experiment spending twenty-four hours aboard the Deep Lab H03, in Prague, thus becoming the **first certified Hydronaut**.*

CONGRATULATIONS from all of us!!

Publications

Spina S, Gianquintieri L, Marrazzo F, Migliari M, Sechi G, Migliori M, Pagliosa A, Bonora R, Langer T, Caiani EG, Fumagalli R. Detection of patients with COVID-19 by the emergency medical services in Lombardy through an operator-based interview and machine learning models. Emergency Medicine Journal 2023 doi: 10.1136/emmermed-2022-212853

Nawaro JA, Gianquintieri L, Pagliosa A, Sechi G, Caiani EG. Heatwave Definition and Impact on Cardiovascular Health: A Systematic Review, Public health Review 2023, 16 October 2023, doi:10.3389/phrs.2023.

Polo, E. M., Farabbi, A., Mollura, M., Paglialonga, A., Mainardi, L., & Barbieri, R. (2023). Comparative assessment of physiological responses to emotional elicitation by auditory and visual stimuli. *IEEE Journal of Translational Engineering in Health and Medicine*.

Steyde, G., Spairani, E., Magenes, G., Signorini M.G. Fetal heart rate spectral analysis in raw signals and PRSA-derived curve: normal and pathological fetuses discrimination. *Med Biol Eng Comput* (2023).
<https://doi.org/10.1007/s11517-023-02953-5v>

Reminder

*****Software*****

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