IEEE SPMB22, now in its 12th year, is a regional symposium intended to provide a highly interactive forum where bioengineering and signal processing researchers can collaborate on emerging trends in signal processing. We expect approximately 200 researchers to attend. We specifically encourage graduate students to attend and present their thesis or dissertation research. This is an excellent opportunity to network with leading professionals in your field and to form new collaborations.

Signal processing plays a vital role in applications ranging from medical electronics to data mining of electronic medical records. The enormous amounts of data that can be acquired from devices are enabling a new generation of technology based on big data. This symposium is intended to bring together a wide range of professionals interested in applications of signal processing medicine and biology. The symposium is sponsored by the IEEE Region 2 Philadelphia Section, Temple University and the Neural Engineering Data Consortium.

The symposium will consist of two plenary talks, three oral sessions and a poster session. Exhibits and demonstrations are encouraged as well. Interested parties should contact the conference organizers at help@ieeespmb.org for further details. Please consult our conference archive for additional information about the history of this conference.

The conference will be held online using Zoom since this seems to be work best for our international audience. In addition to publication of your paper or abstract, a video recording of your contribution will be made available from the conference technical program web page. Please refer to last year’s program to see examples of these presentations.

The conference technical committee will also select a best paper based on both the written submission and oral presentation. Poster submissions are not eligible for this award.

Symposium Topics:

Traditional topics include:
- Signal and image analysis (e.g., EEG, ECG, MRI)
- Machine learning, data mining and classification
- Big data resources and applications

Applications of particular interest this year include:
- Digital Pathology
- Computational Biology
- Quantum Computing

If you have questions about the relevance of a planned submission, feel free to contact the technical committee at help@ieeespmb.org for guidance.

Paper/Abstract Submission:

Presenters may choose to submit to one of two peer-reviewed tracks:

1. Paper: An original four to six-page paper for oral presentation.
2. Poster: A short abstract (one-page min.) that will be presented as a poster.

All papers and abstracts will be submitted to IEEE Xplore for indexing (search for “IEEE SPMB” to find past conferences).

Papers/abstracts can be submitted via email to submit@ieeespmb.org. Contributions must follow the approved conference formats (see guidelines). Videos of your presentations will also be archived online. Final poster submissions include a copy of the poster.

Important Dates:

- Paper Submission: Aug. 1, 2022
- Notification: Oct. 1, 2022
- Paper Revisions: Nov. 1, 2022
- Early Registration: Nov. 15, 2022
- Final Program: Dec. 1, 2022

Organizing Committee:

General Chairs:
- Joseph Picone (Temple)
- Ammar Ahmed (Aptiv)

Technical Program Chair:
- William Mongan (Ursinus)

Program Chairs:
- Vaishali Amin (Temple)
- Benjamin Cichy (SPAWAR)
- Omar Farooq (AMU)
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- Mark Ng (Ulster)
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Publications Chair:
- Georgios Lazarou (USA)

Web: http://www.ieeespmb.org/2022
Contact: help@ieeespmb.org