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# Program in Chronological Order

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**Thursday, March 21, 2019**

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| Su, Jiangyuan ( <i>Shanghai Jiao Tong University</i> ); Zhang, Xin ( <i>Suzhou Institute of Nanotechnology and Nanostructure Bionics</i> ); Li, Mengnan ( <i>Shanghai Jiao Tong University</i> ); Gao, Tian ( <i>Shanghai Jiao Tong University</i> ); Wang, Rui ( <i>Shanghai Jiao Tong University</i> ); Chai, Xinyu ( <i>Shanghai Jiao Tong University, China</i> ); Zhang, Dingguo ( <i>Shanghai Jiao Tong University</i> ); Zhang, Xiaohua ( <i>Suzhou Institute of Nanotechnology and Nanostructure Bionics</i> ); Sui, Xiaohong* ( <i>Shanghai Jiao Tong University</i> )   |          |
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| <b>Simultaneous Impedance Measurements of the Utah Electrodes Array: A Finite Element Method Analysis</b> ....  | 819-822  |
| della Valle, Elena* ( <i>University of Michigan</i> ); Weiland, James ( <i>University of Michigan</i> )   |          |
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| <b>Reversible Conduction Block in Peripheral Mammalian Nerve using Low Frequency Alternating Current</b> .....  | 823-826  |
| Mintch, Landan ( <i>Indiana University Purdue University Indianapolis</i> ); Muzquiz, Ivette ( <i>Indiana University Purdue University Indianapolis</i> ); Horn, Ryne ( <i>Indiana University Purdue University Indianapolis</i> ); Carr, Michael ( <i>Galvani Bioelectronics</i> ); Schild, John ( <i>Indiana University Purdue University Indianapolis</i> ); Yoshida, Ken* ( <i>Indiana University-Purdue University Indianapolis</i> )  |          |
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| <b>Microneedle Penetrating Array with Axon-Sized Dimensions for Cuff-Less Peripheral Nerve Interfacing</b> .....  | 827-830  |
| Yan, Dongxiao* ( <i>University of Michigan</i> ); Jiman, Ahmad ( <i>University of Michigan</i> ); Ratze, David ( <i>University of Michigan</i> ); Huang, Shuo ( <i>University of Michigan</i> ); Parizi, Saman ( <i>University of Michigan</i> ); Welle, Elissa ( <i>University of Michigan</i> ); Ouyang, Zhonghua ( <i>University of Michigan Ann Arbor</i> ); Patel, Paras ( <i>University of Michigan</i> ); Kushner, Mark ( <i>University of Michigan</i> ); Chestek, Cynthia ( <i>University of Michigan</i> ); Bruns, Tim M. ( <i>University of Michigan</i> ); Yoon, Euisik ( <i>University of Michigan</i> ); Seymour, John P. ( <i>University of Michigan</i> ) |          |
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| <b>Flexible, Monolithic, High-Density microLED Neural Probes for Simultaneous Optogenetics Stimulation and Recording</b> .....  | 831-834  |
| Reddy, Jay ( <i>Carnegie Mellon University</i> ); Kimukin, Ibrahim ( <i>Carnegie Mellon University</i> ); Towe, Elias ( <i>Carnegie Mellon University</i> ); Chamanzar, Maysamreza* ( <i>Carnegie Mellon University</i> )   |          |
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| <b>High-Density Steeltrodes: A Novel Platform for High Resolution Recording in Primates</b> .....   | 835-838  |
| Ahmed, Zahir ( <i>Carnegie Mellon University</i> ); Reddy, Jay ( <i>Carnegie Mellon University</i> ); Teichert, Tobias ( <i>University of Pittsburgh</i> ); Chamanzar, Maysamreza* ( <i>Carnegie Mellon University</i> )  |          |
| 16:30-18:30   | ThPO.205 |
| <b>Microfabricated Capacitive Electrodes for High Channel Count ECoG Recording</b> .....  | 839-842  |
| Yin, Heyu* ( <i>MSU</i> ); Ashoori, Ehsan ( <i>Michigan State University</i> ); Parsnejad, Sina ( <i>Michigan State University</i> ); Salationo, Joseph W. ( <i>MSU</i> ); Purcell, Erin ( <i>Michigan State University</i> ); Mason, Andrew ( <i>Michigan State University</i> )   |          |
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| <b>A Novel Biomimetic Stimulator System for Neural Implant</b> .....  | 843-846  |
| Wang, Po-Min* ( <i>UCLA</i> ); Culaclii, Stanislav ( <i>University of California, Los Angeles</i> ); Yang, William ( <i>University of California Los Angeles</i> ); Long, Yan ( <i>Zhejiang University</i> ); Massachi, Jonathan ( <i>University of California, Los Angeles</i> ); Lo, Yi-Kai ( <i>University of California, Los Angeles</i> ); Liu, Wentai ( <i>University of California, Los Angeles</i> )  |          |
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| <b>Ceramic Packages for Acoustically Coupled Neural Implants</b> .....  | 847-850  |
| Shen, Konlin* ( <i>University of California, Berkeley</i> ); Maharbiz, Michel ( <i>University of California, Berkeley</i> )   |          |

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| <b>A Stereotaxic Platform for Small Animals based on 3D Computer Vision and Robotics</b> .....   | 851-854  |
| Ly, Phuong* ( <i>University of Colorado Denver</i> ); Lucas, Alexandra ( <i>University of Colorado Anschutz Medical Campus Dept. of Phy</i> ); Liu, Chao ( <i>University of Colorado Denver</i> ); Klug, Achim ( <i>University of Colorado Anschutz Medical Campus</i> ); Lei, Tim ( <i>University of Colorado Denver</i> )  |          |
| 16:30-18:30  | ThPO.209 |
| <b>Electrode-Skin Impedance Characterization of In-Ear Electrophysiology Accounting for Cerumen and Electrodermal Response</b> .....   | 855-858  |
| Paul, Akshay* ( <i>University of California San Diego</i> ); Deiss, Steve ( <i>University of California San Diego</i> ); Cauwenberghs, Gert ( <i>University of California San Diego</i> )  |          |
| 16:30-18:30  | ThPO.210 |
| <b>A New Process using Magnetic Nanoparticles to Neuronal Cells Growth Orientation</b> .....   | 859-862  |
| Loureiro, Clarissa* ( <i>Faculty of Electrical Engineering and Computing, UNICAMP</i> ); Parada, Carlos Amilcar ( <i>Institute of Biology - UNICAMP</i> ); Ceragioli, Helder ( <i>Faculty of Electrical Engineering and Computing, UNICAMP</i> ); Mendes, Leonardo ( <i>Faculty of Electrical Engineering and Computing, UNICAMP</i> )   |          |
| 16:30-18:30  | ThPO.211 |
| <b>A Scalable Bonding Technique for the Development of Next-Generation Brain-Machine Interfaces</b> .....  | 863-866  |
| Wang, Pingyu ( <i>Stanford University</i> ); Hemed, Nofar Mintz ( <i>Stanford University</i> ); Goh, Timothy ( <i>Stanford University</i> ); Melosh, Nicholas* ( <i>Stanford University</i> )  |          |
| 16:30-18:30  | ThPO.212 |
| <b>Optogenetic Activation of Fiber-Specific Compound Action Potentials in the Mouse Vagus Nerve</b> .....  | 867-870  |
| Tsaava, Tea ( <i>The Feinstein Institute for Medical Research</i> ); Kressel, Adam ( <i>Feinstein Institute</i> ); Uryu, Kunihiro ( <i>Rockefeller University</i> ); Chavan, Sangeeta ( <i>The Feinstein Institute for Medical Research</i> ); Tracey, Kevin ( <i>The Feinstein Institute for Medical Research</i> ); Chang, Eric* ( <i>The Feinstein Institute for Medical Research</i> )   |          |
| 16:30-18:30  | ThPO.213 |
| <b>An Implantable Wireless Network of Distributed Microscale Sensors for Neural Applications</b> .....   | 871-874  |
| Lee, Jihun* ( <i>Brown University</i> ); Mok, Ethan ( <i>Brown University</i> ); Huang, Jiannan ( <i>University of California San Diego</i> ); Cui, Lingxiao ( <i>University of California San Diego</i> ); Lee, Ah-Hyoung ( <i>Seoul National University</i> ); Leung, Vincent ( <i>Qualcomm Institute</i> ); Mercier, Patrick P. ( <i>University of California, San Diego</i> ); Shellhammer, Steven ( <i>Qualcomm</i> ); Larson, Lawrence ( <i>Brown University</i> ); Asbeck, Peter ( <i>University of California San Diego</i> ); Rao, Ramesh R. ( <i>UC, San Diego, Qualcomm Institute- Calit2</i> ); Song, Yoon-Kyu ( <i>Seoul National University</i> ); Nurmikko, Arto ( <i>Brown University</i> ); Laiwalla, Farah ( <i>Brown University</i> ) |          |
| 16:30-18:30  | ThPO.214 |
| <b>Permissive Electroconductive Nanocomposites for Neuronal Progenitor Cells</b> .....   | 875-878  |
| Abasi, Sara ( <i>Texas A&amp;M University</i> ); Aggas, John ( <i>Texas A&amp;M University</i> ); Guiseppi-Elie, Anthony* ( <i>Texas A&amp;M University</i> )  |          |
| 16:30-18:30  | ThPO.215 |
| <b>Hydrogel-Actuated Carbon Fiber Neural Probe</b> .....   | 879-882  |
| Chen, Oliver* ( <i>UC Berkeley</i> ); Maharbiz, Michel ( <i>University of California, Berkeley</i> )   |          |
| 16:30-18:30  | ThPO.216 |
| <b>A Low-Cost Microcontroller based Stimulation System to Study Human Sensory Processing</b> .....   | 883-886  |
| Asman, Priscella* ( <i>University of Houston</i> ); Ince, Nuri Firat ( <i>University of Houston</i> ); Jiang, Tianxiao ( <i>University of Houston</i> ); Ozturk, Musa ( <i>University of Houston</i> )   |          |
| 16:30-18:30  | ThPO.220 |
| <b>EEG-Based Brain Network Analysis in Stroke Patients during a Motor Execution Task</b> .....   | 887-890  |
| Zhao, Chunli ( <i>South China University of Technology</i> ); Li, Rihui ( <i>Year</i> ); Wang, Chushan ( <i>Guangdong Provincial Work-injury Rehabilitation Hospital</i> ); Weitian, Huang ( <i>Guangdong Provincial Work-Injury Rehabilitation Hospital</i> ); Zhang, Yingchun* ( <i>University of Houston</i> )  |          |



Friday, March 22, 2019

FrPO: 16:30-18:30

Grand Ballroom B

**Poster Session II**

Chair: Sajda, Paul (*Columbia University*)

- 16:30-18:30 FrPO.1  
**Complex Network Changes during a Virtual Reality Rehabilitation Protocol following Stroke: A Case Study** ..... 891-894  
Feitosa, Jamille\* (*UNICAMP, Campinas, Brazil*); Filho, Carlos Alberto (*University of Campinas*); Casseb, Raphael (*University of Campinas*); Camargo, Alline (*FCM, UNICAMP, Campinas, Brazil*); Martins, Barbara (*FCM, UNICAMP*); Ballester, Belen (*SPECS, Bioengineering Institute of Catalonia, Barcelona, Spain*); Pedro, Omedas (*Universitat Pompeu Fabra*); Verschure, Paul F M J (*SPECS*); Oberg, Telma (*FCM, UNICAMP, Campinas*); Li, Li Min (*BRAINN - Brazilian Institute of Neurosciences and Neurotechnology*); Castellano, Gabriela (*Institute of Physics Gleb Wataghin, University of Campinas*)
- 16:30-18:30 FrPO.2  
**Epileptic Spike Functional Networks Best Predict Seizure Onset Zones** ..... 895-898  
Maharathi, Biswajit\* (*University of Illinois at Chicago, Chicago*); Loeb, Jeffrey A. (*University of Illinois at Chicago*); Patton, James (*U. Illinois at Chicago (UIC), & the Shirley Ryan Ability Lab (fo)*)
- 16:30-18:30 FrPO.3  
**Neural Alterations during use of a P300-Based BCI by Individuals with Amyotrophic Lateral Sclerosis** ..... 899-902  
Jafari Deligani, Roohollah (*University of Rhode Island*); Sarah, Ismail Hosni (*University of Rhode Island*); Vaughan, Theresa (*Wadsworth Center, New York State Dept. of Health*); McCane, Lynn (*Wadsworth Center*); Zeitlin, Debra (*Helen Hayes Hospital*); McFarland, Dennis (*Wadsworth Center*); Krusienski, Dean (*Virginia Commonwealth University*); Shahriari, Yalda\* (*University of Rhode Island*)
- 16:30-18:30 FrPO.33  
**Pupillary Correlates of Emotion and Cognition: A Computational Model** ..... 903-907  
Balkenius, Christian\* (*Lund University*); Fawcett, Christine (*Uppsala University*); Falck-Ytter, Terje (*Uppsala University*); Gredebäck, Gustaf (*Uppsala University*); Johansson, Birger (*Lund University*)
- 16:30-18:30 FrPO.34  
**Electrical Stimulation-Induced SSSEP as an Objective Index for the Evaluation of Sensory Ability** ..... 908-911  
Su, Shiyong (*Shanghai Jiao Tong University*); Chai, Guohong (*Shanghai Jiao Tong University*); Sheng, Xinjun (*Shanghai Jiao Tong University*); Zhu, Xiangyang\* (*Shanghai Jiao Tong University*)
- 16:30-18:30 FrPO.35  
**Estimation of Task-Evoked Dynamic Effective Connectivity from fMRI in a Visual Target Detection Oddball Experiment** ..... 912-915  
Zhang, Li\* (*Shenzhen University*); Yuan, Yueming (*Shenzhen University*); Li, Jiwei (*The University of Hong Kong*); Huang, Gan (*Shenzhen University*); Chan, Shing-Chow (*The University of Hong Kong*); Zhang, Zhiguo (*Shenzhen University*)
- 16:30-18:30 FrPO.36  
**Detection of Motor Imagery Movements based on the Features of Phase Space Reconstruction** ..... 916-919  
Bagh, Niraj\* (*Indian Institute of Technology, Madras*); M, Ramasubba Reddy (*Indian Institute of Technology Madras*)
- 16:30-18:30 FrPO.37  
**Neutral Entrainment to Speech Envelope in Response to Perceived Sound Quality** ..... 920-923  
Ngo, Dat\* (*University of Texas at Dallas*); Garrett, Oliver (*Lamar University*); Gleb, Tcheslavski (*Lamar University*); Tan, Chin-Tuan (*University of Texas, Dallas*)
- 16:30-18:30 FrPO.38  
**Can Crosstalk Compromise the Recording of High-Frequency Neural Signals?** ..... 924-927  
Porto Cruz, Maria Francisca\* (*University of Freiburg*); Vomero, Maria (*University of Freiburg*); Zucchini, Elena (*Istituto Italiano di Tecnologia*); Delfino, Emanuela (*Italian Institute of Technology - Ferrara*); Asplund, Maria (*University of Freiburg*); Stieglitz, Thomas (*University of Freiburg*); Fadiga, Luciano (*Universita' degli Studi di Ferrara, Ferrara, Italia*)

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| 16:30-18:30  | FrPO.39 |
| <b>Spatial Resolution of Visual Stimuli in SSVEP-Based Brain-Computer Interface</b> .....  | 928-932 |
| Mu, Jing* ( <i>The University of Melbourne</i> ); Grayden, David B. ( <i>The University of Melbourne</i> ); Tan, Ying ( <i>The University of Melbourne</i> ); Oetomo, Denny ( <i>The University of Melbourne</i> )   |         |
| 16:30-18:30  | FrPO.40 |
| <b>Attentional Correlates in Somatosensory Potentials Evoked by Ultrasound Induced Virtual Objects in Mid-Air</b> .....  | 933-936 |
| Lehser, Caroline* ( <i>Saarland University, Medical Faculty</i> ); Strauss, Daniel J. ( <i>Saarland University, Medical Faculty</i> )  |         |
| 16:30-18:30  | FrPO.41 |
| <b>Automated Feature Learning using Deep Convolutional Auto-Encoder Neural Network for Clustering Electroencephalograms into Sleep Stages</b> .....  | 937-940 |
| Prabhudesai, Kedar S. ( <i>Duke University</i> ); Collins, Leslie M.* ( <i>Duke University</i> ); Mainsah, Boyla O. ( <i>Duke University</i> )   |         |
| 16:30-18:30  | FrPO.42 |
| <b>Mutual Information for Transfer Learning in SSVEP Hybrid EEG-fTCD Brain-Computer Interfaces</b> .....   | 941-944 |
| Khalaf, Aya* ( <i>Cairo University</i> ); Sejdic, Ervin ( <i>University of Pittsburgh</i> ); Akcakaya, Murat ( <i>University of Pittsburgh</i> )   |         |
| 16:30-18:30  | FrPO.43 |
| <b>Deep Learning Models for Subject-Independent ERP-Based Brain-Computer Interfaces</b> .....  | 945-948 |
| Tileuov, Adilet ( <i>Nazarbayev University</i> ); Abibullaev, Berdakh* ( <i>Nazarbayev University</i> )  |         |
| 16:30-18:30  | FrPO.44 |
| <b>Underlying Modulators of Frontal Global Field Potentials in Emotion Regulation: An EEG-Informed fMRI Study</b> .....  | 949-952 |
| Fang, Feng ( <i>University of Houston</i> ); Houston, Michael ( <i>University of Houston</i> ); Walker, Sasha ( <i>University of Houston</i> ); Nguyen, Thinh ( <i>University of Houston</i> ); Potter, Tom ( <i>University of Houston</i> ); Zou, Ling ( <i>Changzhou University</i> ); Zhang, Yingchun* ( <i>University of Houston</i> )   |         |
| 16:30-18:30  | FrPO.45 |
| <b>Cross-Modal Consistency of Epileptogenic Network in SEEG and Resting-State fMRI</b> .....   | 953-956 |
| Zhao, Tong ( <i>Tsinghua University</i> ); Wang, Haixiang ( <i>Yuquan Hospital</i> ); Wang, Kang ( <i>Tsinghua University</i> ); Yang, Xiaojiao ( <i>Tsinghua University</i> ); Zhou, WenJing ( <i>Tsinghua University</i> ); Hong, Bo* ( <i>Tsinghua University</i> )   |         |
| 16:30-18:30  | FrPO.46 |
| <b>Deep Neural Networks for Context-Dependent Deep Brain Stimulation</b> .....   | 957-960 |
| Haddock, Andrew* ( <i>University of Washington</i> ); Chizeck, Howard ( <i>University of Washington</i> ); Ko, Andrew ( <i>University of Washington</i> )  |         |
| 16:30-18:30  | FrPO.47 |
| <b>A Model Screening Framework for the Generation of Ca<sup>2+</sup> Oscillations in Hippocampal Neurons using Differential Evolution</b> .....  | 961-964 |
| Upadhyay, Vikas ( <i>Indian Institute of Technology, Hyderabad</i> ); Ravutla, Surya Teja ( <i>IIT Hyderabad</i> ); Dhyani, Vaibhav ( <i>Indian Institute of Technology Hyderabad</i> ); George, Kevin ( <i>Indian Institute of Technology, Hyderabad</i> ); Swain, Sarpras ( <i>Indian Institute of Technology, Hyderabad</i> ); Mitra, Kishalay ( <i>Indian Institute of Technology Hyderabad</i> ); Giri, Lopamudra* ( <i>Indian Institute of Technology, Hyderabad</i> ) |         |
| 16:30-18:30  | FrPO.48 |
| <b>Feature Extraction from the Hermitian Manifold for Brain-Computer Interfaces</b> .....  | 965-968 |
| Xu, Jiachen* ( <i>Max Planck Institute for Intelligent Systems</i> ); Jayaram, Vinay ( <i>Max Planck Institute for Intelligent Systems, Tuebingen</i> ); Schölkopf, Bernhard ( <i>MPI for Biological Cybernetics</i> ); Grosse-Wentrup, Moritz ( <i>Max Planck Institute for Intelligent Systems</i> )   |         |
| 16:30-18:30  | FrPO.49 |
| <b>Characterization of Fiber Photometry Detection Volume for Optical Interrogation of Neural Circuit Dynamics</b> .....  | 969-972 |
| Mansy, May* ( <i>University of Florida</i> ); Kim, Hongjae ( <i>University of Florida</i> ); Oweiss, Karim ( <i>University of Florida</i> )  |         |

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| 16:30-18:30   | FrPO.50   |
| <b>Multimodal Evaluation of Mental Workload using a Hybrid EEG-fNIRS Brain-Computer Interface System</b> .....  | 973-976   |
| Borgeai, Seyyed Bahram* ( <i>University of Rhode Island</i> ); Jafari Deligani, Roohollah ( <i>University of Rhode Island</i> ); McLinden, John ( <i>University of Rhode Island</i> ); Abtahi, Mohammadreza ( <i>University of Rhode Island</i> ); Ostadabbas, Sarah ( <i>Northeastern University</i> ); Mankodiya, Kunal ( <i>University of Rhode Island</i> ); Shahriari, Yalda ( <i>University of Rhode Island</i> ) |           |
| 16:30-18:30   | FrPO.51   |
| <b>Rat Behavioral Changes Due to Implanted Striatal Magnetic Particles Activated with Externally-Applied Magnetic Fields</b> .....  | 977-980   |
| Mair, Lamar ( <i>Weinberg Medical Physics LLC</i> ); Weinberg, Irving* ( <i>Weinberg Medical Physics, Inc.</i> ); Teceno, Delaney N. ( <i>Tufts University</i> ); Jafari, Sahar ( <i>Weinberg Medical Physics Inc</i> ); Stepanov, Pavel ( <i>Weinberg Medical Physics LLC</i> ); Sun, Danica ( <i>WMP</i> ); Ropp, Chad ( <i>WMP</i> ); Hale, Olivia ( <i>WMP</i> ); Vassoler, Fair M. ( <i>Tufts University</i> )     |           |
| 16:30-18:30   | FrPO.52   |
| <b>Neuromorphic Vision and Tactile Fusion for Upper Limb Prosthesis Control</b> .....   | 981-984   |
| Hays, Mark* ( <i>Johns Hopkins University</i> ); Osborn, Luke ( <i>Johns Hopkins University</i> ); Ghosh, Rohan ( <i>National University of Singapore</i> ); Iskarous, Mark ( <i>Johns Hopkins University</i> ); Hunt, Christopher ( <i>Johns Hopkins University</i> ); Thakor, Nitish ( <i>Johns Hopkins University</i> )  |           |
| 16:30-18:30   | FrPO.53   |
| <b>Solving Regression Models with First-Order Stochastic based Optimizers</b> .....   |           |
| Gueorguieva, Natacha* ( <i>City University of NY/College of Staten Island</i> ); Valova, Iren ( <i>University of MA/Dartmouth</i> ); Keegan, Brian ( <i>CUNY/College of Staten Island</i> )   |           |
| 16:30-18:30   | FrPO.54   |
| <b>Supernumerary Body Schema Extension to Non-Corporeal Object by Adding Artificial Tactile Feedback using Electrical Stimulation</b> .....   | 989-992   |
| Manoharan, Stefan Jabez* ( <i>Texas A&amp;M University</i> ); Park, Hangué ( <i>Texas A&amp;M University</i> )  |           |
| 16:30-18:30   | FrPO.55   |
| <b>A Bayesian Approach for Simultaneous Spike Extraction and Sorting</b> .....  | 993-996   |
| Le Cam, Steven* ( <i>Université de Lorraine</i> ); Tran, Harry ( <i>Université de Lorraine, CNRS, CRAN</i> ); Ranta, Radu ( <i>CRAN UMR 7039, Université de Lorraine/ CNRS</i> ); Louis-Dorr, Valerie ( <i>Nancy-University</i> )   |           |
| 16:30-18:30   | FrPO.56   |
| <b>Exploratory Analysis of Brain Signals through Low Dimensional Embedding</b> .....  | 997-1002  |
| Wang, Yuxiao* ( <i>University of California, Irvine</i> ); Ting, Chee-Ming ( <i>University Teknologi Malaysia</i> ); Gao, Xu ( <i>University of California, Irvine</i> ); Ombao, Hernando ( <i>King Abdullah University of Science and Technology</i> )   |           |
| 16:30-18:30   | FrPO.57   |
| <b>Dealing with the SEEG Sparse Setup: A Local Dipole Fitting Strategy</b> .....  | 1003-1006 |
| Le Cam, Steven* ( <i>Université de Lorraine</i> ); Caune, Vairis ( <i>Ventspils University of Applied Sciences</i> ); Ranta, Radu ( <i>CRAN UMR 7039, Université de Lorraine/ CNRS</i> ); Louis-Dorr, Valerie ( <i>Nancy-University</i> )   |           |
| 16:30-18:30   | FrPO.58   |
| <b>A Nonlinear Network Model with Application to Modeling the Retinal Responses</b> .....   | 1007-1010 |
| Zamani, Yasin ( <i>University of Utah</i> ); Nategh, Neda* ( <i>University of Utah</i> )  |           |
| 16:30-18:30   | FrPO.59   |
| <b>EEG-Based User Authentication using a Convolutional Neural Network</b> .....   | 1011-1014 |
| Yu, Ting ( <i>University of California San Diego</i> ); Wei, Chun-Shu ( <i>University of California, San Diego</i> ); Chiang, Kuan-Jung ( <i>University of California San Diego</i> ); Nakanishi, Masaki ( <i>University of California San Diego</i> ); Jung, Tzyy-Ping* ( <i>University of California San Diego</i> )  |           |
| 16:30-18:30   | FrPO.60   |
| <b>Robust Online Spike Recovery for High-Density Electrode Recordings using Convolutional Compressed Sensing</b> .....  | 1015-1020 |
| Weingärtner, Sebastian* ( <i>Stanford University</i> ); Chen, Xiaomo ( <i>Stanford University</i> ); Akcakaya, Mehmet ( <i>University of Minnesota</i> ); Moore, Tirin ( <i>Stanford University</i> )   |           |

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| 16:30-18:30  | FrPO.61   |
| <b>Enabling the Sense of Touch in EMG-Controlled Hand Protheses using Vibro-Tactile Stimulation .....</b>  |           |
| Tayeb, Zied* ( <i>TUM</i> ); Jakovleski, Philipp ( <i>TUM</i> ); Chen, Zhong ( <i>TUM</i> ); Lippert, Jannick ( <i>TUM</i> ); Lanillos Pradas, Pablo ( <i>TUM</i> ); Lee, Dongheui ( <i>TUM</i> ); Cheng, Gordon ( <i>TUM</i> )  |           |
| 16:30-18:30  | FrPO.62   |
| <b>On Source Space Resolution in EEG Brain Imaging for Motor Imagery .....</b>   | 1025-1029 |
| Ranta, Radu* ( <i>CRAN UMR 7039, Université de Lorraine/ CNRS</i> ); Le Cam, Steven ( <i>Université de Lorraine</i> ); Bergmanis-Korats, Gundars ( <i>Ventspils University of Applied Sciences</i> ); Rimbart, Sébastien ( <i>Université de Lorraine, LORIA, INRIA</i> ); Bougrain, Laurent ( <i>University of Lorraine</i> )  |           |
| 16:30-18:30  | FrPO.63   |
| <b>Towards a Single Trial fNIRS-Based Brain-Computer Interface for Communication* .....</b>  | 1030-1033 |
| Borgeai, Seyyed Bahram* ( <i>University of Rhode Island</i> ); Abtahi, Mohammadreza ( <i>University of Rhode Island</i> ); McLinden, John ( <i>University of Rhode Island</i> ); Mankodiya, Kunal ( <i>University of Rhode Island</i> ); Shahriari, Yalda ( <i>University of Rhode Island</i> )  |           |
| 16:30-18:30  | FrPO.64   |
| <b>Cortical Contribution during Active and Passive Pedaling: A Preliminary Study .....</b>   | 1034-1037 |
| Bao, Shi-Chun* ( <i>The Chinese University of Hong Kong</i> ); Leung, Wing Cheong ( <i>The Chinese University of Hong Kong</i> ); Chen, Cheng ( <i>The Chinese University of Hong Kong</i> ); Tong, Kai Yu, Raymond ( <i>The Chinese University of Hong Kong</i> )   |           |
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| 黃, 彥誠 ( <i>National Chiao Tung University</i> ); Chang, Jia-Ren ( <i>National Chiao Tung University</i> ); Chen, Li-Fen ( <i>National Yang-Ming University</i> ); Chen, Yong-Sheng* ( <i>National Chiao Tung University</i> )  |           |
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