2022 8th International Conference on Event-Based Control, Communication, and Signal Processing (EBCCSP 2022)

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DETAILED EBCCSP/NeuroEng 2022 PROGRAM

Day 1 – June 22	
9:45-10:00	Opening ceremony
10:00-11:00	**EBCCSP – Session 1** Shouyu Xie, Edward Jones and Alister Hamilton *Unsupervised STDP-based Radioisotope Identification Using Spiking Neural Networks Implemented on SpiNNaker...1* Xavier Lesage, Rosalie Tran, Stéphane Mancini and Laurent Fesquet *An improved event-by-event clustering algorithm for noisy acquisition...9*
11:00–11:30	Coffee break
11:30–12:30	*Keynote* **Laurent Fesquet** Université Grenoble Alpes, France *Designing Event-Based Electronics...N/A*
12:30–14:00	*Lunch*
14:00–15:00	**EBCCSP – Session 2** Jean Soudier, Sacha De Sousa and Sylvain Durand *Fully Event-Driven Control Architecture, Application to Visual Servoing of a Ball-on-Beam System...17* Maciej Ordowski, Mirosław Pawlak, Dominik Rzepka and Marek Miśkowicz *Signal Estimation from Level Crossings using Conditional Minimum Mean Square Error Predictor...25*

Day 2 – June 23	
13:45-14:45	*Keynote* **Chiara Bartolozzi** Italian Institute of Technology, Italy *Neuromorphic sensing and perception for robots...N/A*
14:45-15:45	**Event Sensing and Neuromorphic Engineering – Session 1** Ziyao Zhang, Maria Sabrina Ma, Jason K. Eshraghian, Daniele Vigolo, Ken-Tye Yong and Omid Kavehei *Neuromorphic Cytometry, High-throughput Event-based flow Flow-Imaging...31* *Work-in-Progress* Nicolo Carissimi, Gaurvi Goyal, Franco Di Pietro, Chiara Bartolozzi and Arren Glover *Unlocking Static Images for Training Event-driven Neural Networks...36* *Work-in-Progress* Sambit Mohapatra, Thomas Mesquida, Mona Hodaei, Senthil Yogamani, Heinrich Gotzig and Patrick Maeder *SpikiLi: A Spiking Simulation of LiDAR based Real-time Object Detection for Autonomous Driving...40*
15:45-16:15	Coffee Break
16:15-18:15	**Event Sensing and Neuromorphic Engineering – Session 2** Leandro de Souza Rosa, Aiko Dinale, Simeon Bamford, Chiara Bartolozzi and Arren Glover *High-Throughput Asynchronous Convolutions for High-resolution Event-cameras...45* Julien Dupeyroux, Stein Stroobants and Guido de Croon *A toolbox for neuromorphic perception in robotics...53* Martin Villemur, Jonah Sengupta, Pedro Julian and Andreas Andreou *Morphological, Object Detection Framework for Embedded, Event-based Sensing...60* Luna Gava, Marco Monforte, Chiara Bartolozzi and Arren Glover *How Late is too Late? A Preliminary Event-based Latency Evaluation...67*
18:15-18:30	Closing ceremony