

# **2022 8th International Conference on Event-Based Control, Communication, and Signal Processing (EBC CSP 2022)**

**Krakow, Poland  
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## DETAILED EBCCSP/NeuroEng 2022 PROGRAM

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

Day 2 – June 23

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