



# Measuring Behavior 2022

## Overview of draft schedule

All scientific presentations 15 mins incl. questions  
 Keynotes, demos, tutorials, 30 mins  
 All times in CET (GMT+2)

<b>Wednesday 18th May</b>	<b>Room 1</b>	<b>Room 2</b>	<b>Room 3</b>
<b>11:00 - 12:00</b>	<b>New developments in analysis and statistics (1)</b>	<b>Measuring behaviour in sports and exercise</b>	
11:00-11:15	Collaborative learning interactions among university students in face-to-face and online meetings during the COVID-19 pandemic: An observational study. H.Q. Chim.	Measuring Performance and Infringements in elite race-walkers: the IART system. Teodorico Caporaso.	
11:15-11:30	The Effects of Stimulus Duration and Group Size on Wearable Physiological Synchrony. Ivo Stuldreher.	Wearables in Elite Sports – Training Support in Snowboarding through Plantar Pressure Sensors and Inertial Measurement Units. Stefan Schwanitz.	
11:30-11:45	Start Making Sense: Predicting confidence in virtual human interactions using biometric signals. Sara Dalzel-Job.	Chainring Eccentricity Affects Pedal Force Profiles and Musculoskeletal Responses During Cycling. Amy Robinson.	
11:45-12:00	Meeting data analytics for IoT-enabled communication systems. Vijayakumar Sowmya.	Assessing the likelihood of serve success using nearest neighbourhood methods. Andy Hext.	
<b>13:00 - 14:00</b>	<b>New developments in analysis and statistics (2)</b>	<b>Automatic behavior recognition in rodents: how new technology moves the field forward (1)</b>	<b>Using Drones to Transform the Measurement of Behaviour</b>
13:00-13:15	Improving the Annotation Efficiency for Animal Activity Recognition using Active Learning. Suzanne Spink.	uBAM: Unsupervised Behavior Analysis and Magnification using Deep Learning. Björn Ommer.	Use of Unmanned Aerial Vehicles (UAVs) for Applied Animal Ethology. John Church.
13:15-13:30	Data Synchronisation and Processing in Multimodal Research. Tenzing Dolmans.	Self-supervised learning as a gateway to reveal underlying dynamics in animal behavior. Kevin Luxem.	Choosing the Right Drone for Animal Research. Spencer Serin.
13:30-13:45		Deep learning systems for automated rodent behavior recognition systems suffer from observer bias: Time to raise the bars. Elsbeth van Dam.	Use of Aerial Thermal Imaging to Compare Assess Surface Temperatures Between Light and Dark Variants of Black Angus x Canadian Speckle Park Cattle. Joanna Urbana.
13:45-14:00		Multi-animal pose estimation, identification, tracking and action segmentation with DeeplabCut. Alexander Mathis.	Using UAVs to measure behavioral indicators of heat stress in cattle. John Church.
14:00-14:15			Baboons on the Move: Enhancing Understanding of Collective Decision Making through Automated Motion Detection from Aerial Drone Footage. Christopher Crutchfield.
<b>14:15 - 15:00</b>	<b>Demos</b>	<b>Automatic behavior recognition in rodents: how new technology moves the field forward (2)</b>	
14:15-14:30		Live Mouse Tracker 2022 : new animals, new features, new limits. Fabrice de Chaumont.	
14:30-14:45		Learning to embed lifetime social behavior from interaction dynamics. Benjamin Wild.	
14:45-15:00	<b>Posters</b>	Measuring Social Behavior from Video and Trajectory Data of Interacting Mice. Jennifer Sun.	
15:00-15:15	<b>Posters</b>	Discussion	
<b>15:15 - 16:15</b>	<b>Posters</b>	-	-
<b>16:20: 17:00</b>		<b>Keynote: Latest techniques for measuring learning and memory. Prof. Chris de Zeeuw</b>	

Thursday 19th May	Room 1	Room 2	Room 3
11:00 - 12:00	<b>Methods and tools for measuring emotions</b>	<b>Addressing the reproducibility problem in research: Challenges and future prospects</b>	
11:00-11:15		Assessing the scientific quality of online interventions for psychological well-being: Are we doing good science in times of the pandemic? Cristina Rodríguez-Prada.	
11:15-11:30	Measuring Micro-Expressions during Animals' Social Interactions. Irene Camerlink.	The EQIPD Quality System: a unique tool to improve the robustness of preclinical drug discovery research data. Björn Gerlach.	
11:30-11:45	How mask is mask for Parkinson's Disease? Fan Xu.	How to replicate behavior in the lab: lessons learned from 50 users a year. Lior Bikovski.	
11:45-12:00	Ethnicity & FaceReader 9 – A Fair Face Case Study. Jason Rogers.	Psychological theory and replication. Garnt Dijksterhuis.	
12:00-12:15		Can we replicate our own results? Richard Brown.	
<b>13:00 - 14:00</b>	<b>Tutorials</b>	<b>Methods in food and eating studies</b>	<b>Exhibitors</b>
13:00-13:15	Building A Behavioral Core. Jason Rogers.	Dr Cecilia, Virtual Treatment of Eating Disorders. Per Sodersten.	
13:15-13:30		Conscious and unconscious emotional response evoked by food appearance in children: a study based on automatic facial expression analysis and skin conductance response . Noelia da Quinta.	
13:30-13:45		The Effect of Virtual Reality on Eating Behaviours and Hunger: A Randomized Crossover Study. Billy Langlet.	
13:45-14:00		An Attempt to Assess the Effects of Social Demand using Explicit and Implicit Measures of Food Experience. Pria Sabu.	
14:00-14:15		How Diet Composition Correlates with Cognitive Functioning - Application of Principal Component Analysis (PCA) to Nutritional Data. Wanda Zarzycka.	
<b>14:15 - 15:00</b>	<b>Demos</b>	<b>Workshop: Measurement Tools for Food Consumer Science</b>	<b>Exhibitors</b>
14:15-14:30			
14:30-14:45			
14:45-15:00			
<b>15:15 - 16:15</b>	<b>New tests in pre-clinical neuroscience</b>		
15:15-15:30	See what you have been missing: what locomotor activity can teach us in terms of refinement, reduction and replicability 'round the CLOCK (24/7) animal studies. Stafano Gaburro.	Consumer's background - Harmonizing Measures Emerging measures COMFOCUS toolbox	
15:30-15:45	Public data resource and mining tools of AHCODA-DB combine conventional and automated home-cage data and discriminate neurodegeneration from healthy ageing in mice. Bastijn Koopmans.	Ethics - challenges and RRI General discussion	
15:45-16:00	Beyond locomotion: stimulus selectivity of sensory evoked behaviours unfolds in a higher dimensional space. Riccardo Storchi.		
16:00-16:15			
<b>16:20: 17:00</b>	-	<b>Keynote: From food perception to behavior. Prof. Liesbeth Zandstra.</b>	

**Friday 20th May**

	<b>Room 1</b>	<b>Room 2</b>	<b>Room 3</b>
<b>11:00 - 12:00</b>	<b>Sensors &amp; multi-modal measurements</b>	<b>Measuring the behavior of farm animals</b>	<b>Psychology and economics</b>
11:00-11:15	Understanding the effects of sleep deprivation and acute social stress on cognitive performance using a comprehensive approach. Charelle Bottenheft.	A simple and cost effective EdgeAI sensor platform for unattended behavioral monitoring of animals on farming lands. Nicolas Innocenti.	Measuring Behavior in Counseling Clinic Waiting Areas. Laurelee Wikkerink.
11:15-11:30	Quantifying Interactions between Physiological Signals to Identify Exposure to Different Chemicals. Anne-Marie Brouwer.	Early movements within a commercial aviary are related to later health. Camille Montalcini.	Measuring Behavior of Low-Vision Populations Using Virtual Reality. Lauren Ashley Hughes.
11:30-11:45	Pupil Diameter to estimate Sense of Embodiment. Sara Falcone.	Farmers risk perception and agricultural productivity: evidence from field experiments. Subir Sen.	Triangulating Consumer Behavior and Attitudes to Assess New Market Opportunities. Martin Jolie.
11:45-12:00	Recognition of Basic Gesture Components using Body Attached Bending Sensors. Dominik Krumm.	Using Cow Location Data For Practical On-farm Applications – A Pilot Study. Lenny van Erp.	
<b>13:00 - 14:00</b>	<b>Sensors &amp; multi-modal measurements</b>	<b>Measuring the behavior of farm animals</b>	
13:00-13:15	A Distance-Based Classification Method to Assess Frontal Behavior from Human Behavioral Sensing. Bénédicte Batrancourt.	Using Infrared Thermographic Images for Early Detection of Clinical Lameness in Dairy Cattle. Gerben Hofstra.	
13:15-13:30	Multi-modal assessment of the behavioral markers of apathy under real-life context - Towards a telemonitoring instrument of patient-caregiver couples' psychological health. Godefroy Valérie	Turkey Gait Analysis: Predicting Expert Score With Machine Learning Based on IMU Data. Jan Erik Doornweerd.	
13:30-13:45	Optimal subgroup identification in a P300-based collaborative Brain-Computer Interface. Luigi Bianchi.	What do pregnant mares do at night? Activity budgets in pregnant mares before foaling – a pilot study. Linnea Pålsson.	
13:45-14:00			
<b>14:15 - 15:00</b>	<b>Sensors &amp; multi-modal measurements</b>	<b>Animal sensory systems.</b>	
14:15-14:30	Setup for Multimodal Human Stress Dataset Collection. Bhargavi Mahesh.		
14:30-14:45	Assessing disinhibition behaviour in behavioural variant frontotemporal dementia patients using ecological, cognitive and anatomical tasks. Delphine Tanguy.		
14:45-15:00	Feasibility study of magnetoencephalographic inter-subject synchrony during music listening. Nattapong Thammasan.		
	Identifying Canine Posture from a Wearable Sensor: Application of Cross-Disciplinary Methods to Companion Animal Monitoring. Jack O'Sullivan.		
<b>15:00 - 16:15</b>		<b>Animal welfare (4)</b>	
15:00-15:15		Designing tasks to compare behaviours in a range of different species: A case study in whisker movement analysis. Robyn Grant.	
<b>15:15 - 16:15</b>	<b>Automotive human factors</b>		
15:15-15:30	Do Car Drivers Respond Earlier to Close Lateral Motion Than to Looming? The Importance of Data Selection. Malin Svärd.	The use 24 hour activity and video monitoring to determine the social preference of male and female C57BL/6J mice. Joanna Moore.	
15:30-15:45	A comparison of two methodologies for subjective evaluation of comfort in automated vehicles. Chen Peng.	ZooMonitor: A User-friendly App to Record Behavior and Space Use of Animals. Jason Wark.	

15:45-16:00	Applying Entropy to Understand Drivers' Uncertainty during Car-following. Wei Lyu.	Different approaches to study emotions and social interactions of farm animals for a deeper understanding of animal welfare. Jan Langbein.	
16:00-16:15	Development of an algorithm to identify stabilisation time for car-following after transitions of control from vehicle automation. Rafael Gonçalves.	Optimizing zebrafish welfare - effects of environmental enrichment on agonistic behavior and stress response in groups of zebrafish kept in different densities. Oly Sarma.	
16:20: 17:00	<b>Keynote: Neuroergonomics: monitoring the brain in complex real-life situations.</b> Prof. Frederic Dehais.		-

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