



# WORKSHOP PROGRAM

2026 IEEE INTERNATIONAL WORKSHOP ON

**Measurements** and **Applications**

in **Veterinary** and **Animal Sciences**

PADOVA - APRIL 28-30, 2026



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

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# IEEE MeAVeAS 2026 Committee

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Enza Panzardi, University of Siena, Italy

## IEEE MeAVeAS 2026 Keynote Speakers

Keynote Lecture - Tuesday April 28 - H 12:00



### Precision Dairy Farming: Turning Data into Better Decisions

**Ben Aernouts**

*Faculty of Engineering Technology, Department of Biosystems, Unit of Animal and Human Health Engineering, KU Leuven, Belgium*

#### **ABSTRACT**

Precision dairy farming is reshaping milk production through the integration of sensing technologies, data analytics, and biological knowledge to support more informed and timely management decisions. This presentation explores how tools such as wearable sensors, automated milking systems, computer vision, and decision-support software are being used to continuously monitor animal health, behavior, and the farm environment. These systems enable earlier detection of disease, improved reproductive management, and more efficient use of feed, labor, and other resources.

Recent advances in sensor performance, data integration, and artificial intelligence have expanded the potential of precision dairy farming, allowing large volumes of real-time data to be translated into actionable insights. Examples from commercial dairy operations demonstrate how these technologies can improve animal welfare, productivity, and operational consistency, while also highlighting practical challenges related to data quality, system interoperability, economic returns, and user adoption. The presentation will address how producers and advisors can evaluate precision tools within the context of whole-farm management rather than as standalone technologies.

The role of precision dairy farming in supporting sustainability goals is also examined, including its potential to reduce environmental impacts, optimize resource use, and increase resilience to labor constraints and climate variability. Emerging developments such as predictive analytics, integrated farm platforms, and digital representations of animals and production systems suggest a shift toward more proactive and systems-based management approaches. Ultimately, effective implementation of precision dairy farming depends not only on technological innovation, but also on aligning data-driven insights with farmer experience and decision-making processes to deliver measurable value across the dairy sector.

## SPEAKER BIOGRAPHY

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Prof. **Ben Aernouts** is an expert in livestock production and precision dairy farming, serving as a professor in Management in Livestock Production at the Faculty of Engineering Technology, KU Leuven (Campus Geel), Belgium. He earned both his Master's and PhD degrees in Bioscience Engineering from KU Leuven, completing his doctoral research on the optical behaviour of raw milk and its relation to quality attributes. Following his PhD, he continued as a postdoctoral researcher, applying his findings to the design and on-farm validation of advanced optical sensors for milk quality and cow health monitoring. To further expand his expertise in data processing, he also spent time as a visiting researcher at the Natural Resources Institute Finland (Luke).

Since October 2016, Prof. Aernouts has led the Livestock Technology Group, guiding a multidisciplinary team focused on the development, implementation and validation of innovative sensor technologies and data-processing algorithms to support data-driven livestock management. His research spans on-farm milk quality monitoring, cow and behaviour sensors, time-series analytics, and precision dairy decision support systems. In addition to his research, he teaches courses on livestock production, cattle management, and precision livestock farming.

Prof. Aernouts' work bridges engineering, animal science and farm practice, with strong collaborations across academia, industry and agricultural stakeholders. His group's projects address issues such as mastitis monitoring, milk yield dynamics, reproductive modelling, and resilient dairy cattle identification, all aimed at improving animal welfare, productivity and sustainability in modern dairy systems.

## Keynote Lecture - Wednesday April 29 - H 12:00



### Why aren't we doing that? The potential and pitfalls of AI in veterinary medicine

**Parminder S. Basran**

*Cornell University College of Veterinary Medicine, US*

#### ABSTRACT

Artificial intelligence holds transformative potential for veterinary medicine, yet significant barriers prevent its widespread adoption. We examine why AI tools remain underutilized in veterinary settings despite demonstrated benefits in diagnostic accuracy, workflow efficiency, and patient care in human medicine. By exploring the technical, practical, and educational challenges that impede the integration of AI into routine clinical workflows, we identify pathways toward integrating AI technologies in veterinary medicine while avoiding pitfalls observed in human medicine.

A central challenge lies in data interoperability across veterinary medicine. Unlike standardized formats such as DICOM used in medical imaging, veterinary data types are less structured and often lack standards, which hinders the development of computer vision and machine learning models. The absence of common data frameworks complicates efforts to integrate AI tools with electronic health records and existing clinical workflows. The integration of multimodal data, which combines medical imaging, laboratory results, clinical notes, and sensor-derived information, has the potential to improve diagnostics; however, simply merging these data types does not guarantee improved performance in multimodal machine learning. We illustrate the effects of disparate multimodal data types and the challenges of multi-institutional data in studies of feline gastrointestinal diseases using ultrasound, biomarker, and biopsy data. Bridging the gap between AI potential and practical implementation requires coordinated efforts across technology development, policy formation, education reform, and interdisciplinary collaboration.

#### SPEAKER BIOGRAPHY

Dr. **Parminder S. Basran** is an Associate Research Professor at Cornell University's College of Veterinary Medicine, a Fellow of the Canadian College of Physicists in Medicine, and a Fellow of the American Association of Physicists in Medicine. He obtained his Ph.D. from the University of Calgary (2002), and his expertise spans radiation dosimetry, medical image processing, AI, and education. Dr. Basran is intensely focused on translating medical physics knowledge and practice well beyond human medicine to other disciplines, such as livestock and veterinary

medicine, and other dimensions under a "One Health" paradigm. His lab, Veterinary AI in Diagnostic Imaging and Radiotherapy (VAIDER Lab), collaborates with radiologists, pathologists, computing scientists, oncologists, and other healthcare disciplines in both human and veterinary medicine. He is an ardent advocate for the global dissemination of medical physics knowledge, with projects focused on democratizing access to education and data.

## IEEE MeAVeAS 2026 Venue

IEEE MeAVeAS 2026 will be held at **Best Western Plus Hotel Galileo - Padova.**



Hotel Best Western Galileo in Padova is an elegant 4 stars hotel located near the center of Padova. All the most interesting and evocative city sites are within a short walking distance.

Starting from the Hotel you can visit the city center, the Scrovegni Chapel painted by Giotto, the Astronomical observatory of Galileo and much more.



### ADDRESS

Best Western Plus Hotel Galileo  
Via Venezia 30  
Padova

Use the QRCode to open the location on *Google Maps*



# IEEE MeAVeAS 2026 Patronages



## Program Schedule - Tuesday, April 28

TUESDAY - APRIL 28, 2026			
09:30 - 10:00			
OPENING CEREMONY - WELCOME ADDRESSES			
	SALA LUNA	SALA EUROPA	SALA GANIMEDE
10:00 - 11:40	S1.1 - Bridging sustainability and intrinsic quality of animal-sourced foods: conceptual frameworks, tools and metrics	S1.2 - Metrology for Food Quality, Safety, and Traceability - PART I	S1.3 - Advanced dissuasion techniques and technologies for the protection of livestock against predations
11:40 - 12:00	COFFEE BREAK		
12:00 - 13:00	KEYNOTE LECTURE - Ben Aernouts Precision Dairy Farming: Turning Data into Better Decisions		
13:00 - 14:30	LUNCH		
	SALA LUNA	SALA EUROPA	SALA GANIMEDE
14:30 - 16:30	S2.1 - Prototype Systems and Measurement Technologies for Assessing Behavioural Patterns in Livestock	S2.2 - Metrology for Food Quality, Safety, and Traceability - PART II	S2.3 - AI applications in Veterinary Medical Imaging
16:30 - 17:00	COFFEE BREAK		
18:30 - 20:00	WELCOME PARTY - Caffè Pedrocchi - Via VIII Febbraio, 15 - Padova		

## Program Schedule - Wednesday, April 29

WEDNESDAY - APRIL 29, 2026			
	SALA LUNA	SALA EUROPA	SALA GANIMEDE
09:30 - 11:30	S3.1 - Smart sensing and computer vision applications for monitoring animal behaviour, health, and welfare - PART I	S3.2 - Biologging for Animal Health, Welfare and Environmental Adaptation	S3.3 - Metrology for Food Quality, Safety, and Traceability - PART III
11:30 - 12:00	COFFEE BREAK		
12:00 - 13:00	KEYNOTE LECTURE - Parminder S. Basran Why aren't we doing that? The potential and pitfalls of AI in veterinary medicine		
13:00 - 14:20	LUNCH		
	SALA LUNA	SALA EUROPA	SALA GANIMEDE
14:20 - 16:00	S4.1 - Smart sensing and computer vision applications for monitoring animal behaviour, health, and welfare - PART II	S4.2 - Advanced Measurement Systems and Data-Driven Solutions for Sustainable and Climate-Resilient Livestock Systems - PART I	S4.3 - Precision Measurement for Sustainable and Welfare-Oriented Pig Farming Systems
16:00 - 16:30	COFFEE BREAK		
16:30 - 18:00	Panel - Women in Science: Stories, Challenges and New Horizons		
20:30 - 22:30	SOCIAL DINNER - Casa Exforo - Prato della Valle 70/A - Padova		

## Program Schedule - Thursday, April 30

THURSDAY - APRIL 30, 2026			
	SALA LUNA	SALA EUROPA	SALA GANIMEDE
09:00 - 11:00	S5.1 - Biosensors and AI for Diagnostics in Veterinary and Animal Sciences	S5.2 - Advanced Measurement Systems and Data-Driven Solutions for Sustainable and Climate-Resilient Livestock Systems - PART II	S5.3 - Precision Nutrition Technologies in Animal Husbandry: Advancements and Future Perspectives
11:00 - 11:30	COFFEE BREAK		
11:30 - 12:30	Round Table - Innovation and Sustainability: The Role of Smart Technologies in Veterinary Science and Animal Production		
12:30 - 13:00	CLOSING AND AWARD CEREMONY		
13:00 - 14:00	LIGHT LUNCH		

## Technical Program - Tuesday, April 28

09:00 - 17:00 *Best Western Plus Hotel Galileo*  
**REGISTRATIONS**

09:30 - 10:00 *Sala Luna*  
**OPENING CEREMONY**  
**Chairs:** Flaviana Gottardo, *University of Padova, Italy*  
Alessandro Pozzebon, *University of Padova, Italy*

### **Institutional greetings**

Daniela Mapelli, *Rector of the University of Padova, Italy*

Flaviana Gottardo, *Honorary Chair, University of Padova, Italy*

Claudio Narduzzi, *Honorary Chair, University of Padova, Italy*

Alessandro Zotti, *Director of the Department of Animal Medicine, Production and Health, University of Padova, Italy*

Gaudenzio Meneghesso, *Director of the Department of Information Engineering, University of Padova, Italy*

Fabrizio Dughiero, *Director of the Department of Industrial Engineering, University of Padova, Italy*

### **Welcome message**

Tommaso Banzato and Alessandro Pozzebon, *General Chairs, University of Padova, Italy*

### **Overview of the Technical Program**

Lorenzo Serva, Giovanni Franzo and Nicola Trivellin, *TPC Chairs, University of Padova, Italy*

10:00 - 11:40 *Sala Luna*  
**S1.1 - Bridging sustainability and intrinsic quality of animal-sourced foods: conceptual frameworks, tools and metrics**  
**Chairs:** Mohammed Gagaoua, *PEGASE, INRAE, France*  
Nigel Scollan, *Queen's University Belfast, United Kingdom*  
Lynda Perkins, *Queen's University Belfast, United Kingdom*

### **10:00 Sustainability Assessment of Small Ruminant Farming System in Northern Apulia Using the FAO SAFA Framework**

Antonella della Malva, Emilia Lamonaca, Maria Giovanna Ciliberti, Antonella Santillo and Marzia Albenzio (University of Foggia, Italy)

- 10:20 Advancing Nutritional Life Cycle Assessment (nLCA): Evaluating Functional Units for Integrating Nutrition, Health, and Environmental Impact of Animal Sourced Foods**  
Lynda Perkins, Ryan Mcguire, Lana Bothwell and Anne Nugent (Queen's University Belfast, United Kingdom); Mohammed Gagaoua (PEGASE, INRAE, Institut Agro, France); Nigel Scollan (Queen's University Belfast, United Kingdom)
- 10:40 Direct Prediction of Beef Eating Quality from Raw Muscle Using REIMS Spectral Output**  
Lynda Perkins, Wenyang Jia (Queen's University Belfast, United Kingdom); Alix Neveu (Birkenwood Pty Ltd, Australia); Tim Rowe (Castell Howell Foods Ltd and Celtica Foods Ltd, United Kingdom); Pip Nicholas-Davies (Aberystwyth University, United Kingdom); Anastasios Koidis Koidis, Nigel Scollan (Queen's University Belfast, United Kingdom)
- 11:00 How Do Conventional, Organic and Free-Range Pig Farming Systems Differ in Their Environmental Impacts? A Meta-Analysis and Multivariate Analysis of Pig Life Cycle Assessment Studies**  
Mohammed Gagaoua, Adrien Karolak (PEGASE, INRAE, Institut Agro, Saint-Gilles, France)
- 11:20 Development and Validation of Portable NIRS Calibration Models for Predicting Fecal Composition**  
Chiara Evangelista, Federico Manganello, Francesca Petrocchi Jasinski, Loredana Basiricò, Umberto Bernabucci and Pier Paolo Danieli (University of Tuscia, Italy)

10:00 - 11:20

*Sala Europa*

**S1.2 - Metrology for Food Quality, Safety, and Traceability - PART I**

**Chairs:** Martina Marcolin, *University of Padova, Italy*

Luca Fasolato, *University of Padova, Italy*

- 10:00 From Benchtop to Portable Sensors: NIR Spectroscopy and Colour Analysis for Honey Quality and Origin Evaluation**  
Alessia Zoroaster, Andrea Calore, Severino Segato, Paolo Berzaghi and Anisseh Sobhani (University of Padova, Italy); Nicoletta Dainese (Istituto Zooprofilattico Sperimentale delle Venezie, Italy); Lorenzo Serva (University of Padova, Italy)
- 10:20 Critical Importance of pH and Aw Measurement Site in Dry-Aged Meat and Its Implications for Food Safety**  
Federica Savini, Elena Zanato, Giulia Polizzi, Laura Prandini, Alessandro Seguino, Alessandra De Cesare and Valentina Indio (University of Bologna, Italy); Silvia Vianello and Lucia Buratti (Experimental Zooprophyllactic Institute of Lombardy and Emilia Romagna, Bologna, Italy); Andrea Serraino (University of Bologna, Italy)
- 10:40 Virulence Potential and Antimicrobial Resistance of Bacillus Cereus Isolated from Infant Formulae**  
Viviana Fusi, Simone Stella (University of Milan, Italy); Emilia Ghelardi and Francesco Celandroni (Università di Pisa, Italy); Cristian Bernardi, Filippa Maria Addis and Clara

Locatelli (University of Milan, Italy); Christian Scarano, Francesca Piras and Giuliana Siddi (Università Degli Studi di Sassari, Italy); Erica Tirloni (University of Milan, Italy)

**11:00 Dairy Cows Affected by Intramammary Infection, Subclinical and Clinical Mastitis: Changes in Milk Metabolome Profiles**

Lisuzzo Anastasia (University of Padua, Italy); Maria Chiara Alterisio and Sergio Esposito (University Federico II Naples, Italy); Luca Laghi (University of Bologna, Italy); Antonella Pesce (Istituto Zooprofilattico Sperimentale del Mezzogiorno, Italy); Paolo Ciaramella (University Federico II Naples, Italy); Francesca Cecchini, Giorgia Taio, Michele Berlanda and Matteo Giancesella (University of Padua, Italy); Jacopo Guccione (University Federico II Naples, Italy); Enrico Fiore (University of Padua, Italy)

10:00 - 11:40

*Sala Ganimede*

**S1.3 - Advanced dissuasion techniques and technologies for the protection of livestock against predations**

**Chairs:** Alessandro Pozzebon, *University of Padova, Italy*  
Giacomo Peruzzi, *University of Padova, Italy*

**10:00 An Integrated Non-Lethal Deterrence Solution Approach to Mitigate Wolf-Livestock Conflicts**

Leonardo Martin, Giacomo Peruzzi, Matteo Bertocco, Nicola Trivellin, Alessandro Pozzebon (University of Padova, Italy)

**10:20 Field Testing of an Acoustic anti-Wolf Collar for Livestock Protection in Southern Italy**

Pietro Orlando (University of Reggio Calabria, Italy)

**10:40 A Dual Triggered Smart Detection System Based on RADAR and PIR for Wolf-Livestock Conflict Mitigation**

Leonardo Martin, Giacomo Peruzzi, Matteo Bertocco, Nicola Trivellin, Alessandro Pozzebon (University of Padova, Italy)

**11:00 Molecular Measurement Workflows for Tick-Borne Pathogen Detection in Sub-Saharan Livestock**

Tingxi Zhang, Marika Grillini, Giorgia Dotto (University of Padova, Italy); Eric Yessinou (University of Abomey-Calavi, Benin); Hermogenes Neves Mucache and Luis Neves (Eduardo Mondlane University, Mozambique); Rudi Cassini (University of Padova, Italy)

11:40 - 12:00

*Best Western Plus Hotel Galileo*

**COFFEE BREAK**

12:00 - 13:00

Sala Luna

**KEYNOTE LECTURE**

**Chairs:** Lorenzo Serva, *University of Padova, Italy*  
Chiara Evangelista, *University of Tuscia, Italy*

**Precision Dairy Farming: Turning Data into Better Decisions**

Ben Aernouts, *Faculty of Engineering Technology, Department of Biosystems, Unit of Animal and Human Health Engineering, KU Leuven, Belgium*

13:00 - 14:30

Best Western Plus Hotel Galileo

**LUNCH**

14:30 - 16:10

Sala Luna

**S2.1 - Prototype Systems and Measurement Technologies for Assessing Behavioural Patterns in Livestock**

**Chairs:** Luisa Magrin, *University of Padua, Italy*  
Angela Costa, *University of Bologna, Italy*

**14:30 A Wearable Vibration System for Communicating with Dairy Cows**

Hen Honig (Department of Animal Welfare, Israel); O. Forkosh (Hebrew University of Jerusalem, Israel); Y. Salzer, B. Shaked, L. Rosenfeld, G. Lidor, L. Reshef and N. Saraf (Agricultural Research Organization, Israel)

**14:50 Sensor-Based Detection of Drinking Behaviour and Water Intake Variability in Dairy Cattle for Precision Farming**

Rebecca Goretti, Damiano Cavallini, Jacopo Vegni, Martina Lamanna, Andrea Formigoni, Riccardo Colleluori, Marco Bovo, Carlos Alejandro Perez Garcia, Giulio Visentin, Yari Vecchio and Angela Costa (University of Bologna, Italy)

**15:10 Does Feed Anticipation Modulate Vocal Acoustic Parameters in Young Water-Buffaloes?**

Madalina Mincu-Iorga and Dinu Gavojdian (Research and Development Institute for Bovine, Romania)

**15:30 Water-to-Gain Balance Identifies Distinct Adaptation Trajectories in Young Beef Cattle Imported from France**

Caterina Marcon, Alessia Visentini, Simone Dante and Luisa Magrin (University of Padova, Italy)

**15:50 High-Resolution Monitoring of Social Interactions in Dairy Cows Using a Prototype Ultra-Wideband System**

Valentina Becciolini, Sebastian Schweizer and Matteo Barbari (University of Florence, Italy)

14:30 - 16:30

*Sala Europa***S2.2 - Metrology for Food Quality, Safety, and Traceability - PART II****Chairs:** Alessia Zoroaster, *University of Padova, Italy*Luca Fasolato, *University of Padova, Italy*

- 14:30 Exploring Natural Antimicrobial Strategies Against *Campylobacter* Spp. with Diverse Antimicrobial Resistance Profiles Along the Poultry Production Chain**  
Rossana Roila and Andrea Cantarini (University of Perugia, Italy); Francesca Piras and Christian Scarano (Università Degli Studi di Sassari, Italy); Enrico De Santis (University of Rome La Sapienza, Italy); Erica Tirloni, Simone Stella and Filippa Maria Addis (Università degli Studi di Milano, Italy); Giuliana Siddi (Università Degli Studi di Sassari, Italy); David Ranucci, Rana Karasoy and Raffaella Branciarì (University of Perugia, Italy)
- 14:50 Development of a Spectral Library for the Detection of Nitrite Fraud in Tuna**  
Martina Marcolin, Sarah Currò (University of Padova, Italy); Tiziana Nardin (Fondazione Edmund Mach, Italy); Enrico Novelli, Luca Fasolato and Stefania Balzan (University of Padova, Italy)
- 15:10 Inactivation of *Opisthorchis felinus* Metacercariae in Tench by Freezing and Combined Treatment with Smoking and Refrigeration**  
Raffaella Franceschini (University Tor Vergata, Rome, Italy); Francesco Agnetti (IZSUM, Italy); David Ranucci, Rossana Roila, Rana Karasoy, Andrea Cantarini and Raffaella Branciarì (University of Perugia, Italy)
- 15:30 Characterization of Goat Milk Cheeses from Native Breeds Produced Using Traditional and Innovative Ripening Methods**  
Marika Di Paolo, Marica Egidio, Rosa Luisa Ambrosio, Federica Capano (University of Federico II of Naples, Italy); Michelangelo Galella (ASP Potenza, Department of Prevention, Italy); Loriana Casalino (Universitas Mercatorum, Italy); Salvatore Claps (CREA Research Centre for Animal Production and Aquaculture, Italy); Raffaele Marrone (University of Naples Federico II, Italy)
- 15:50 Application of Electronic Nose Technology to Differentiate Aroma Profiles in Bovine and Buffalo Cheeses Subjected to Various Dietary Treatments**  
Loriana Casalino (Universitas Mercatorum, Italy); Marika Di Paolo, Marica Egidio, Sara Balestra and Giovanmaria Pacelli (University of Naples Federico II, Italy); Anna Balestrieri (Istituto Zooprofilattico del Mezzogiorno, Italy); Raffaele Marrone (University of Naples Federico II, Italy)
- 16:10 Repeatability of MALDI-TOF MS *Campylobacter jejuni* Spectra in Sub-Species Studies**  
Evgeniia Igosheva (University of Padova, Italy); Laura Prandini, Valentina Indio, Federica Savini and Alessandra De Cesare (University of Bologna, Italy); Roberta Tolosi (University of Padova, Italy); Andrea Serraino (University of Bologna, Italy); Federica Giacometti (University of Padova, Italy)

14:30 - 16:30

*Sala Ganimede*

**S2.3 - AI applications in Veterinary Medical Imaging**

**Chairs:** Tommaso Banzato, *University of Padova, Italy*

Polina Zemko, *University of Padova, Italy*

**14:30 The Longissimus Dorsi Ultrasound Evaluations Influenced by Stocking Density in Beef Heifers**

Lisuzzo Anastasia, Giorgia Taio (University of Padua, Italy); Silvia Miretti, Carmine Versace, Paolo Cornale and Antonio Mimosi (University of Turin, Italy); Enrico Fiore (University of Padua, Italy); Francesca Cecchini, Chiara Tommasoni (University of Padova, Italy); Matteo Boso (Veterinary Practitioners, Italy); Matteo Giancesella (University of Padova, Italy)

**14:50 UNet for Automatic Pneumothorax Detection on Canine and Feline CTs**

Nicolò Mastromattei (University of Padua, Italy); Artur Jurgas (AGH University of Krakow, Poland); Tommaso Pilla (Animal Hospital Postojna, Italy); Diane Wilson (Antech Imaging Services, USA); Marek Wodzinski (AGH University of Krakow, Poland); Andre Dourson (Antech Imaging Services, USA); Silvia Burti, Polina Zemko, Alessandro Zotti, Tommaso Banzato (University of Padova, Italy)

**15:10 Deep Learning-Based Automated Segmentation of Canine Adrenal Glands Nodules on CT-Images**

Silvia Burti and Nicolò Mastromattei (University of Padua, Italy); Artur Jurgas and Marek Wodzinski (AGH University of Krakow, Poland); Diane Wilson (Antech Imaging Services, USA); Gaia De Lorenzi, Nicole Antonella Lotesoriere, Alessandro Zotti, Tommaso Banzato (University of Padova, Italy)

**15:30 Development of an Artificial Intelligence-Based Method for the Quantification of Left Atrial Size in Dogs from Lateral Thoracic Radiographs**

Carlotta Valente (University of Padua, Italy); Marek Wodzinski (AGH University of Krakow, Poland); Leonardo Galvan, Chiara Gerardo, Carlo Guglielmini, Helen Poser, Alessandro Zotti, Tommaso Banzato (University of Padova, Italy)

**15:50 Benchmarking Deep Architectures for Automated VLAS Measurement in Canine Lateral Thoracic Radiographs**

Marek Wodzinski (AGH University of Krakow, Poland); Carlotta Valente (University of Padua, Italy); Artur Jurgas (AGH University of Krakow, Poland); Leonardo Galvan, Chiara Gerardo, Carlo Guglielmini, Helen Poser, Alessandro Zotti, Tommaso Banzato (University of Padova, Italy)

**16:10 Region-Based Hierarchical Training for Nested Small-Structure Segmentation in Veterinary CT**

Artur Jurgas (AGH University of Krakow, Poland); Silvia Burti and Nicolò Mastromattei (University of Padua, Italy); Marek Wodzinski (AGH University of Krakow, Poland); Gaia De Lorenzi, Nicole Antonella Lotesoriere, Tommaso Banzato (University of Padova, Italy)



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16:30 - 17:00 *Best Western Plus Hotel Galileo*  
**COFFEE BREAK**

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18:30 - 20:00 *Caffè Pedrocchi - Via VIII Febbraio, 15 - Padova*  
**WELCOME PARTY**

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## Technical Program - Wednesday, April 29

09:00 - 17:00	<i>Best Western Plus Hotel Galileo</i> <b>REGISTRATIONS</b>
09:30 - 11:30	<i>Sala Luna</i> <b>S3.1 - Smart sensing and computer vision applications for monitoring animal behaviour, health, and welfare - PART I</b> <b>Chairs:</b> Claudia Giannone, <i>University of Bologna, Italy</i> Emanuela Dalla Costa, <i>University of Milan, Italy</i>
09:30	<b>Open-Set Recognition of Dairy Cows with Computer Vision and RFID</b> Claudia Giannone, Carlos Alejandro Perez Garcia, Damiano Cavallini, Martina Lamanna, Marco Bovo, Andrea Formigoni, Daniele Torreggiani and Patrizia Tassinari (University of Bologna, Italy)
09:50	<b>The Importance of Having Enough Space: Assessing Lying Behaviour in Horses Housed in Single Boxes</b> Chiara Maccario, Elie Atallah, Emanuela Dalla Costa (Università degli Studi di Milano, Italy)
10:10	<b>What We Know About Tools in Horse Sleep/Resting Behavior and Why We Should Ask More</b> Angela Perrone Barbosa, Tiago Marcelo Oliveira, Roberta Carvalho Basile and Raquel Yvonne Arantes Baccarin (Universidade de São Paulo, Brazil)
10:30	<b>How Does Social Reshuffling Influence Lying Behaviour in Donkeys?</b> Elie Atallah, Chiara Maccario, Elisa Basso Ricci and Emanuela Dalla Costa (Università degli Studi di Milano, Italy)
10:50	<b>Semi-Automated Assessment of the Ecotoxicological Effects of 3D Printing Materials on the Survival and Reproduction of <i>Folsomia Candida</i></b> Anita Casadei, Lorenzo Filicetti, Antonio DeSimone, Donato Romano (Scuola Superiore Sant Anna, Italy)
11:10	<b>Tech-Driven Evolution of Animal Housing: Exploring Technologi-Cal Integration and Challenges in Mountain Livestock Farming</b> Andrea Silvestri, Monica Parlato, Andrea Pezzuolo (University of Padova, Italy)
09:30 - 11:30	<i>Sala Europa</i> <b>S3.2 - Biologging for Animal Health, Welfare and Environmental Adaptation</b> <b>Chairs:</b> Alfonso Abecia, <i>Universidad de Zaragoza, Spain</i> Asgeir Bjarnason, <i>Star-Oddi Ltd., Iceland</i>

- 09:30 Circadian Collapse-Recovery Dynamics of Physiological and Behavioral Signals Improve Estrus Prediction in Sheep Using Wearable Sensors and AI-Based Modeling**  
José-Alfonso Abecia and Adriana Casao (Universidad de Zaragoza, Spain); María Pilar Pina (UNIZAR, Spain); Marta Lafuente (UPNA, Spain); Cristina Peña, Ricardo López and Ignacio Ontañón (UNIZAR, Spain); Rosaura Pérez-Pe (Universidad de Zaragoza, Spain)
- 09:50 Autonomic Dynamics and Early Prediction of Parturition in Sheep Using Continuous Physiological Signals**  
Carlos Palacios, Jaime Nieto and Javier Plaza (Universidad de Salamanca, Spain); José-Alfonso Abecia (Universidad de Zaragoza, Spain)
- 10:10 Use of Bio-Loggers to Assess Heat Stress in Piedmontese Cows Under Different Stocking Densities**  
Isabella Manenti, Giovanni Perona (University of Turin, Italy); Stefano Di Carlo, Roberta Bardini, Lorenzo Martini and Alessia Leclercq (Politecnico di Torino, Italy); José-Alfonso Abecia (Universidad de Zaragoza, Spain); Asgeir Bjarnason (Star-Oddi & Star-Oddi Ltd., Iceland); Silvia Miretti, Paolo Cornale (University of Turin, Italy)
- 10:30 The Connection Between Heart Rate, Accelerometry, and Metabolic Rate in Ungulates: Physiological Meaning and Applications for Biologging**  
Asgeir Bjarnason (Star-Oddi & Star-Oddi Ltd., Iceland)
- 10:50 Cardiac Dynamics of Mares During Different Breeding Procedures: Mixed-Effects Models of HR and HRV Using Polar Sensors**  
Javier Plaza, Santos Del Pozo, María Elena Pérez García, Jaime Nieto (Universidad de Salamanca, Spain); José-Alfonso Abecia (Universidad de Zaragoza, Spain); Carlos Palacios (Universidad de Salamanca, Spain)
- 11:10 Free-Range Hen Activity with Outdoor Restrictions Measured by Tri-Axial Accelerometers**  
José-Alfonso Abecia (Universidad de Zaragoza, Spain); Roberto Vitaller and Marimar Campo (IA2, Departamento de Producción Animal y Ciencia de los Alimentos, Universidad, Spain)

09:30 - 11:30

*Sala Ganimede*

**S3.3 - Metrology for Food Quality, Safety, and Traceability - PART III**

**Chairs:** Loriana Casalino, *Universitas Mercatorum, Italy*

Marika Di Paolo, *University of Naples Federico II, Italy*

- 09:30 Enumeration of Enterobacteriaceae in Foodstuffs by BS EN ISO 21528-2:2017: Is It Time to Change It?**  
Roberta Tolosi, Evgeniia Igosheva, Riccardo Miotti Scapin, Valerio Giaccone, Federica Giacometti (University of Padova, Italy)
- 09:50 Quantifying E. Coli in Bivalve Molluscs: A Comparative per-Formance Evaluation of MPN and Pour-Plate Techniques**

Beatrice Testa, Rosa Luisa Ambrosio, Valeria Vuoso, Giusi Fiore, Raffaele Marrone, Aniello Anastasio (University of Naples Federico II, Italy)

**10:10 Risk Assessment of Staphylococcus Aureus in Ripened Artisanal Goat Cheeses**

Giusi Fiore, Valeria Vuoso, Beatrice Testa, Carmen Cabato, Aniello Anastasio, Rosa Luisa Ambrosio (University Federico II Naples, Italy)

**10:30 Italian Beef is Not a Source of Potentially Toxic Elements for General Population: Updated Evidence**

Maria Olga Varrà and Giovanni Tommaso Lanza (University of Parma, Italy); Lenka Husáková (University of Pardubice, Czech Republic); Federico Ferrari (University of Parma, Italy); Valentina Lorenzi (Istituto Zooprofilattico Sperimentale della Lombardia ed Emilia-Romagna, Italy); Luigi Bertocchi (Istituto Zooprofilattico Sperimentale Lombardia ed Emilia Romagna, Italy); Martina Piroutková and Jan Patočka (University of Pardubice, Czech Republic); Sergio Ghidini (University of Milan, Italy); Emanuela Zanardi (University of Parma, Italy)

**10:50 Blood-Based Biomarkers of Frailty in Aging Dogs: Preliminary Results from the OLD DOG Longitudinal Study**

Polina Zemko, Tommaso Banzato, Federico Bonsembiante (University of Padua, Italy)

**11:10 Modernizing the Dairy Food Chain: A Data-Driven Innovation for Smart Farming**

Francesca D. Sotgiu (University of Sassari, Italy); Francesco Martini, Nicoletta Deiana, Tiziana Fanni, Silvia Macis, Katuscia Zedda (Abinsula srl, Italy); Matteo Sini, Andrea Mattu, Antonio Spezzigu, Pietro Masala, Alberto Atzori, Antonello Ledda and Giovanna Seddaiu (University of Sassari, Italy); Ciriaco Ligios and Riccardo Bazzardi (Istituto Zooprofilattico Sperimentale della Sardegna, Italy); Fiammetta Berlinguer (University of Sassari, Italy)

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11:30 - 12:00 *Best Western Plus Hotel Galileo*  
**COFFEE BREAK**

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12:00 - 13:00 *Sala Luna*  
**KEYNOTE LECTURE**  
**Chair:** Tommaso Banzato, *University of Padova, Italy*

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## **Why aren't we doing that?**

### **The potential and pitfalls of AI in veterinary medicine**

Parminder S. Basran, *Cornell University College of Veterinary Medicine, US*

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13:00 - 14:20 *Best Western Plus Hotel Galileo*  
**LUNCH**

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14:20 - 15:40 *Sala Luna*  
**S4.1 - Smart sensing and computer vision applications for monitoring animal behaviour, health, and welfare - PART II**  
**Chairs:** Elie Atallah, *University of Milan, Italy*  
Marco Bovo, *University of Bologna, Italy*

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**14:20 Monitoring Lambing Behavioral Changes in Ewes Using Tri-Axial Accelerometry**  
Setayesh Ghadir and Delaram Ghadir (CNIT, Italy); Adele Frau (Università di Sassari, Italy); Tesfalem Mehari Berhe (CNIT, Italy); Francesca D. Sotgiu and Julien Spyros Karel D'Hallewin (University of Sassari, Italy); Davide Adami (CNIT Pisa Research Unit, University of Pisa, Italy); Stefano Giordano (University of Pisa, Italy); Francesca Mossa and Fiammetta Berlinguer (University of Sassari, Italy)

**14:40 Assessing Welfare in Dairy Cows During Hoof Trimming Through Infrared Thermography**  
Gaia Pesenti Rossi, Carolina Giorgiutti, Sara Barbieri, Emanuela Dalla Costa and Elisabetta Canali (University of Milan, Lodi, Italy)

**15:00 A Design of Digital Twin for Smart Dairy Farming: A Systematic Review**  
Anisseh Sobhani, Alessia Zoroaster, Barbara Contiero, Giulio Cozzi, Paolo Berzaghi (University of Padova, Italy); Ben Aernouts (KU Leuven, Belgium); Fernando Estellés (Universitat Politècnica de València, Spain); Lorenzo Serva (University of Padua, Italy)

**15:20 Reading Between the Lines: An Algorithm for Electroencephalogram (EEG) Analysis in Horses**  
Angela Perrone Barbosa (Universidade de São Paulo, Brazil); Francesco Maria Tagorra (Università degli Studi di Milano, Italy); Tiago Marcelo Oliveira (University of São Paulo, Brazil); Chiara Maccario, Elie Atallah (Università degli Studi di Milano, Italy); Raquel Yvonne Arantes Baccarin (Universidade de São Paulo, Brazil); Emanuela Dalla Costa (Università degli Studi di Milano, Italy)

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14:20 - 16:00 *Sala Europa*  
**S4.2 - Advanced Measurement Systems and Data-Driven Solutions for Sustainable and Climate-Resilient Livestock Systems - PART I**  
**Chairs:** Provvidenza D'Urso, *University of Catania, Italy*  
Ester Scotto di Pertà, *University of Naples Federico II, Italy*  
Francesco Bonavolontà, *University of Naples Federico II, Italy*

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**14:20 In-Field Validation of an IoT-Based System for Monitoring Ammonia and Fine Particulate Matter from Livestock Buildings**  
Provvidenza Rita D'Urso, Grazia Cinardi, Luciano Manuel Santoro, Hugo Pennanech and Giovanni Cascone (University of Catania, Italy); Francesco Bonavolontà (Università di Napoli Federico II, Italy); Claudia Arcidiacono (University of Catania, Italy)

- 14:40 Quantifying NH<sub>3</sub> Emissions in Naturally Ventilated Dairy Barns: A Decade of Methodological Advancements and Challenges**  
Alessandra Apostolico, Ester Scotto di Perta and Elena Cervelli (University of Naples Federico II, Italy); Tomas Norton (KU Leuven - University, Belgium); Stefania Pindoizzi (University of Naples Federico II, Italy)
- 15:00 Low-Cost Drone System for Monitoring Ammonia and GHG Emissions in Dairy Barns: A Case Study in Southern Italy**  
Valentina Becciolini, Alessio Mattia and Giuseppe Rossi (University of Florence, Italy); Provvidenza Rita D'Urso, Grazia Cinardi, Claudia Arcidiacono (University of Catania, Italy); Leonardo Conti (University of Florence, Italy)
- 15:20 High-Frequency Environmental Measurements for Data-Driven Livestock Management**  
Ambra Milani and Francesco Corradini (Cynomys, Italy)
- 15:40 An IoT-Based Multi-Gas Monitoring Platform for Real-Time Air Quality Assessment in Livestock Buildings**  
Elia Landi, David Baldo, Stefano Parrino, Marco Tani, Ada Fort, Marco Mugnaini, Irene Cappelli and Enza Panzardi (University of Siena, Italy)

14:20 - 15:40

*Sala Ganimede*

**S4.3 - Precision Measurement for Sustainable and Welfare-Oriented Pig Farming Systems**

**Chairs:** Annalisa Scollo, *University of Turin, Italy*

Flaviana Gottardo, *University of Padova, Italy*

Guido Di Martino, *Experimental Zooprophyllactic Institute of the Veneto*

- 14:20 Evaluation of an Automatic Feeding System: Effects on Lactating Sow Feed Intake and Piglet Growth**  
Daniele Favaro (University of Padua, Italy & Freelance Veterinary Doctor - SUIVET, Italy); Matilde Campara, Flaviana Gottardo and Barbara Contiero (University of Padua, Italy); Elisa Moscon (Freelance Veterinary Doctor - SUIVET, Italy); Francesco Tonon (University of Padua, Italy & Freelance Veterinary Doctor - SUIVET, Italy)
- 14:40 Precision Livestock Farming for Tail Biting Management in a Commercial Breeding Environment**  
Guido Di Martino (Experimental Zooprophyllactic Institute of the Veneto, Italy); Aurora Ambrosi, Vittoria Tregnaghi, Rachele Urbani, Giacomo Nalesso and Massimiano Bassan (Istituto Zooprofilattico Sperimentale delle Venezie, Italy); Valentina Bonfatti (University of Padua, Italy); Giovanni Alborali (Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna, Italy); Giorgio Provolo (University of Milan, Italy); Grazia Manca (Istituto Zooprofilattico Sperimentale delle Venezie, Italy)
- 15:00 Economic Impact of Porcine Epidemic Diarrhea Virus in Growing Pigs: An Integrated Algorithm Combining Causal Inference Analysis and a Full-Budget Model**

Alice Perrucci (University of Turin, Italy & Struttura Srl, Manerbio, BS, Italy); Heitor De Avila (Dept. of Animal Science, Iowa State University, US, Brazil); Annalisa Scollo (University of Torino, Italy); Edison Magalhaes (Dept. of Animal Science, Iowa State University, US, USA)

**15:20 Piglet Crushing Mechanisms in Temporary Crating Systems: Insights from Continuous Video Monitoring**

Maria Costanza Galli, Letizia Leone, Annalisa Scollo (University of Torino, Italy)

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16:00 - 16:30 *Best Western Plus Hotel Galileo*

**COFFEE BREAK**

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16:30 - 18:00 *Sala Luna*

**PANEL - Women in Science: Stories, Challenges and New Horizons**

**Chairs:** Angela Costa, *University of Bologna, Italy*

Enza Panzardi, *University of Siena, Italy*

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**Still the Only Woman in the Room? A Woman Engineer's Perspective**

Enza Panzardi (University of Siena)

**Smart Farming, Smarter Inclusion: How Technology is Reshaping Women's Roles in Livestock**

Giorgia Fabbri (University of Padova)

**Women Matter in Animal Science: The Role of Associations in Supporting Careers and Shaping the Future**

Lucia Bailoni (University of Padova), Paola Crepaldi (University of Milano), ASPA Study Group "Gender Equity"

**Women in Veterinary Medicine in Italy: Experiences, Challenges and Perspectives - ADMV (Italy)**

Sara Nicolini (Associazione Donne Medico Veterinario)

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20:30 - 22:30 *Casa Exforo - Prato della Valle 70/A - Padova*

**SOCIAL DINNER**

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## Technical Program - Thursday, April 30

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09:00 - 12:00 *Best Western Plus Hotel Galileo*  
**REGISTRATIONS**

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09:00 - 11:00 *Sala Luna*  
**S5.1 - Biosensors and AI for Diagnostics in Veterinary and Animal Sciences**  
**Chair:** Giovanni Franzo, *University of Padova, Italy*

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- 09:00 Unmasking the Underdog: Advanced Molecular Strategies to Improve Piroplasm Characterisation and Unveil Co-Infections in Dogs and Ticks**  
Marika Grillini (University of Padua, Italy); Hana Tadesse (Addis Ababa University, Ethiopia); Tingxi Zhang (University of Padua, Italy); Naledi Sekgobela (University of Pretoria, South Africa); Giorgia Dotto and Giovanni Franzo (University of Padova, Italy); Bersissa Kumsa (Addis Ababa University, Ethiopia); Raksha Bhoora (University of Pretoria, South Africa); G. Simonato (Key Laboratory of Livestock Infectious Diseases in Northeast China, Ministry of Education, College of Animal Science and Veterinary Medicine, Shenyang Agricultural University); Rudi Cassini (University of Padova, Italy)
- 09:20 Molecular Detection and Genospecies Diversity of Borrelia in Ixodes Ricinus Ticks from an Endemic Area of Northeastern Italy**  
Filippo Marzoli, Federica Obber, Alessia Franzoso, Erica Maria Fabiano, Carlo Vittorio Citterio, Ilenia Drigo and Graziana Da Rold (Istituto Zooprofilattico Sperimentale delle Venezie, Italy)
- 09:40 Molecular Detection of Echinococcus Multilocularis and Cestode Infections in Alpine Small Rodents**  
Graziana Da Rold, Filippo Marzoli, Alessia Franzoso, Erica Maria Fabiano, Carlo Vittorio Citterio and Federica Obber (Istituto Zooprofilattico Sperimentale delle Venezie, Italy); Rudi Cassini, Erica Marchiori, Leonardo Turioni (University of Padua, Italy); Eva Ladurner (Museum of Nature South Tyrol, Italy)
- 10:00 Integrating Lactation and Dry off Data to Predict Post Calving Intramammary Infections in Dairy Cows**  
Luca Barin, Paolo Balasso and Giorgio Marchesini (University of Padua, Italy); Antonio Barberio (Istituto Zooprofilattico Sperimentale delle Venezie, Italy)
- 10:20 Detection of Coronet Temperature Changes in Horses Using Infrared Thermography During Partial Limb Occlusion and Reperfusion**  
Chiara Maccario (Università degli Studi di Milano, Italy); Jil Jessy Kellershohn (Vetsuisse-Fakultät Universität, Swaziland); Annika Bremhorst (Vetsuisse-Fakultät Universität, Switzerland); Livia Dumont (Veterinary Dept. of the Swiss Armed Forces); Stéphane Montavon (Swiss Armed Forces, Switzerland); Claudia Spadavecchia (Vetsuisse-Fakultät Universität, Switzerland); Feighelstein Marcelo, Sr. (Engineering Cluster, Tel-Hai University of Kiryat Shmona on the Galilee, Israel); Anna Zamansky

(University of Haifa, Israel); Emanuela Dalla Costa (Università Degli Studi di Milano, Italy)

**10:40 Sequence-Informed Machine Learning to Predict Antigenic Distance Among Newcastle Disease Virus (NDV) Strains**

Giovanni Franzo (University of Padova, Italy); Alice Fusaro and Isabella Monne (Istituto Zooprofilattico Sperimentale delle Venezie, Italy); Mattia Cecchinato (University of Padova, Italy); Alessio Bortolami (Istituto Zooprofilattico Sperimentale delle Venezie, Italy)

09:30 - 10:50

*Sala Europa*

**S5.2 - Advanced Measurement Systems and Data-Driven Solutions for Sustainable and Climate-Resilient Livestock Systems - PART II**

**Chair:** Alberto Finzi, *University of Milan, Italy*

**09:30 Subclinical Ketosis as a Driver of Enteric Greenhouse Gas Emissions in Dairy Cows**

Giorgia Taio, Lisuzzo Anastasia (University of Padova, Italy); Erminio Trevisi, Fiorenzo Piccioli-Cappelli (Università Cattolica del Sacro Cuore, Italy); Francesca Arfuso and Elisabetta Giudice (University of Messina, Italy); Federico Frolidi (Università Cattolica del Sacro Cuore, Italy); Francesca Cecchini and Matteo Gianesella, Enrico Fiore, Michele Berlanda (University of Padova, Italy)

**09:50 Comparison Among Different Variables from a Laser Methane Detector (LMD) in a Feeding Trial with Fattening Bulls**

Fabio Palmiro Abeni, Stefania Barzaghi, Lucia Zingale (CREA, Italy); Andrea Scarabello (Associazione Produttori Carni Bovine, Italy); Luciano Migliorati (CREA, Italy)

**10:10 Measurement Systems and Policy-Oriented Software Tools for CH<sub>4</sub>, CO<sub>2</sub> and NH<sub>3</sub> Emissions in Livestock Systems**

Giulia Pastorelli (CREA, Italy); Giacomo Contò (CREA Research Centre for Animal Production and Aquaculture, Italy); Claudia Ciarelli (ISMEA - the Institute for Services to the Agricultural and Food Market, Italy); Ilaria Falconi (CREA Research Centre for Agricultural Policies and Bioeconomy, Italy)

**10:30 Assessment of Air Quality and Emissions in Naturally Ventilated Pig Houses Using an IoT Gas and Environmental Sensors Device**

Alberto Finzi, Antonio Mautone (Università degli Studi di Milano, Italy)

09:00 - 11:00

*Sala Ganimede*

**S5.3 - Precision Nutrition Technologies in Animal Husbandry: Advancements and Future Perspectives**

**Chairs:** Damiano Cavallini, *University of Bologna, Italy*  
Martina Lamanna, *University of Bologna, Italy*

- 09:00 Morphometric Variability of Cervical and Thoracic Circumferences in Holstein Dairy Cows Across Lactation Stage and Age**  
Martina Lamanna, Riccardo Colleluori, Marco Canova, Annamaria Grandis, Claudia Giannone and Marco Bovo (University of Bologna, Italy); Francesco Petretto (IP Ingegneria SRL, Italy); Andrea Formigoni and Damiano Cavallini (University of Bologna, Italy)
- 09:20 Blood Metabolomic Characteristics in Dairy Cows Treated with Hepato-Protectors During the Transition Period**  
Lisuzzo Anastasia (University of Padua, Italy); Alessio Valenza (Ceva Animal Health, Italy); Luca Laghi (University of Bologna, Italy); Giorgia Taio (University of Padua, Italy); Matteo Ganesella (University of Padua, Italy); Andrea Biancucci (Italy); Enrico Fiore (University of Padua, Italy)
- 09:40 Cyromazine Contaminated Substrate: Effects on Life-History Characters and Heat Resistance of *Hermetia illucens***  
Asia Zanzot (University of Pisa, Italy); Tara N. McNeil and Jeffery K. Tomberlin (Texas A&M University, USA); Simone Mancini (University of Pisa, Italy)
- 10:00 Antiproliferative Action of Diketopiperazines Extracted from Vinery by-Products in a Sheep Model**  
Maria Giovanna Ciliberti, Marzia Albenzio, Matteo Francavilla, Cristina Stango, Antonella Santillo, Mariangela Caroprese and Agostino Sevi (University of Foggia, Italy)
- 10:20 Assessing Liveweight Dynamics and Production Responses to Nutritional Level in Sarda Dairy Ewes Through Walk-over-Weighing Technology**  
Mauro Decandia, Marco Acciaro, Andrea Frongia, Maria G. Serra and Andrea Cabiddu (AGRIS Sardegna, Italy); Irene Llach and Eliel González-García (SELMET, France); Valeria Giovanetti (AGRIS Sardegna, Italy)
- 10:40 GPS-Based Assessment of Pasture Space Use in Nera di Arbus Sheep to Support Grazing Management**  
Marco Acciaro and Andrea Frongia (AGRIS Sardegna, Italy); Antonio Solinas and Gabriele Carru (Abinsula Srl, Italy); Mauro Decandia, Maria Sitzia and Valeria Giovanetti (AGRIS Sardegna, Italy)

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11:00 - 11:30 *Best Western Plus Hotel Galileo*  
**COFFEE BREAK**

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11:30 - 12:30

*Sala Luna*

**ROUND TABLE - Innovation and Sustainability: The Role of Smart Technologies in Veterinary Science and Animal Production**

**Chairs:** Tommaso Banzato, *University of Padova, Italy*  
Nicola Trivellin, *University of Padova, Italy*

**Speakers**

Fabio Abeni, *CREA*

Emanuele Pernechele, *Regione Veneto*

Manfredo Atzori, *University of Padova*

Asgeir Bjarnason, *Star Oddi*

Marek Wodzinski, *AGH University of Krakow*

12:30 - 13:00

*Sala Luna*

**CLOSING AND AWARD CEREMONY**

13:00 - 14:00

*Best Western Plus Hotel Galileo*

**LIGHT LUNCH**

