



24th CONGRESS
OF THE ANIMAL SCIENCE AND PRODUCTION ASSOCIATION
ANIMAL SCIENCE AND SOCIETY CONCERNS
SEPTEMBER 21-24, 2021 PADOVA (ITALY)

FINAL PROGRAMME

Tuesday, September 21st

PLENARY SESSION “Animal Science and Society Concerns” - Fiera di Padova

Chair: Nicolò Pietro Macciotta

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| 15.00-15.15 | Nicolò Pietro Paolo Macciotta <i>Introduction</i> | |
| 15.15-15.45 | Massimiliano Bucchi <i>Animal production and society</i> | IS001 |
| 15.45-16.15 | Elena Nalon <i>Societal and political demands on farmed animal welfare: an evolving landscape</i> | IS002 |
| 16.15 | <i>Coffee break</i> | |
| 16.45-17.15 | Giovanni Bittante <i>From Padova 1987 to Padova 2021: evolution of the scientific research</i> | IS003 |
| 17.15-17.45 | Bruno Ronchi <i>Challenges of Italian livestock systems towards a full environmental sustainability</i> | IS004 |

Opening Ceremony - Fiera di Padova

Chair: Giulio Cozzi

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| 18.00-18.15 | Welcome addresses | |
| 18.15-18.45 | Fabio Zampieri <i>Eight centuries of the University of Padua (1222-2022): An historical sketch</i> | IS005 |
| 18.45-19.15 | Lucia Bailoni <i>From Pietro Arduino and Giuseppe Orus to the Agripolis Campus: analogies with present times between historical realities and possible fakes</i> | IS006 |
| 19.30 | Welcome Cocktail | |

Agenda for oral presentations

Wednesday, September 22nd - Room Galileo
09:00 - 10:30

SESSION 1 - Alternative feeds and waste recycling - I

Chairs: Antonella Dalle Zotte, Laura Gasco

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| 09.00-09.15 | Erika Pellattiero, Marco Cullere, Federica Zanetti, Barbara Alberghini, Sara Berzuini, Silvia Tavarini, Incoronata Galasso, <u>Antonella Dalle Zotte</u> <i>Effect of Camelina (Camelina sativa L. Crantz) dietary inclusion on quails growth performance and carcass traits</i> | O001 |
| 09.15-09.30 | <u>Nicola Francesco Addeo</u> , Alessandra Roncarati, Giovanni Piccolo, Antonino Nizza, Fulvia Bovera <i>Potential use of a queen bee larvae meal (Apis mellifera ligustica Spin.) in animal nutrition: a nutritional and chemical-toxicological evaluation</i> | O002 |
| 09.30-09.45 | <u>Yazavinder Singh</u> , Eszter Zsedely, Georgina Takacs, Zsolt Herman, Klaudia Szalai, Marco Cullere, Silvia Cappellozza, Antonella Dalle Zotte <i>Effect of silkworm (Bombyx mori) dietary inclusion on chickens' growth performance and carcass traits</i> | O003 |
| 09.45-10.00 | <u>Giulia Pascon</u> , Maria Messina, Lisa Petit, Luísa Maria Pinheiro Valente, Beatriz Monteiro Oliveira, Cyrille Przybyla, Gilbert Dutto, Francesca Tulli <i>Marine microalgal biomass from fish farming effluents: potential application in aquafeeds</i> | O004 |
| 10.00-10.15 | <u>Sara Bellezza Oddon</u> , Ilaria Biasato, Laura Gasco <i>Isoenergetic-practical and semi-purified diets for protein requirement determination in Hermetia illucens larvae: consequences on life history traits</i> | O005 |
| 10.15-10.30 | <u>Francesco Bordignon</u> , Laura Gasco, Marco Birolo, Christian Caimi, Gerolamo Xiccato <i>Effects of the inclusion of Hermetia illucens meal in diets for rainbow trout (Oncorhynchus mykiss) reared in a low-tech aquaponic system</i> | O006 |

Wednesday, September 22nd - Room Giotto
08:30 - 10:15

SESSION 2 - Management strategies to improve animal health, welfare and resilience - I

Chairs: Giulio Cozzi, Giovanna Martelli

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| 08.30-9.00 | Invited Lecture Annalisa Scollo <i>Mutilations in pigs: searching for a new state-of-mind of the farmer</i> | IS007 |
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| 09.00-09.15 | <u>Luciana Bava</u> , Alice Comparelli, Maria Cecilia Bianchi, Alberto Tamburini, Maddalena Zucali <i>Dry period management practices in 130 dairy farms</i> | O007 |
| 09.15-09.30 | <u>Luca Turini</u> , Alice Cappucci, Fabrizio Bertelloni, Elisa Gasparoni, Francesca Vichi, Marcello Mele <i>Mutual relationship between technological, structural and productive features in dairy sheep farms: a multivariate approach</i> | O008 |
| 09.30-09.45 | <u>Diana Giannuzzi</u> , Rossella Tessari, Enrico Fiore, Matteo Giancesella, Vittoria Bisutti, Sara Pegolo <i>Association between liver ultrasound measurements and hematochemical indicators for early prediction of metabolic alterations in Holstein cows</i> | O009 |
| 09.45-10.00 | <u>Luca Cattaneo</u> , Andrea Minuti, Fiorenzo Piccioli Cappelli, Erminio Trevisi <i>Blood biomarkers before dry-off are related to better adaptation to transition period in dairy cows</i> | O010 |
| 10.00-10.15 | <u>Isabella Lora</u> , Giovanna Ranzato, Luisa Magrin, Giulio Cozzi <i>Comparison between cow milk and a high-energy whey-based milk replacer for the weaning of Holstein dairy heifers</i> | O011 |

Wednesday, September 22nd - Room Petrarca 08:30 - 10:00

SESSION 3 - Role and characterization of local breeds

Chairs: Luca Fontanesi, Cristina Sartori

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| 08.30-08.45 | <u>Elena Benedetti del Rio</u> , Marta Teston, Edi DeFrancesco, Paola Gatto <i>Sustainable use of local sheep breeds in Italian Eastern Alps</i> | O012 |
| 08.45-09.00 | <u>Enrico Mancin</u> , Cristina Sartori, Nadia Guzzo, Beniamino Tuliozzi, Roberto Mantovani <i>Change of accuracy in EBVs due to genomic information in the small Rendena cattle populations</i> | O013 |
| 00.00-09.15 | <u>Giulia Foggi</u> , Francesca Ciucci, Laura Casarosa, Elisabetta Giannessi, Carla Lenzi, Maria Conte, Marcello Mele <i>Histochemical muscle fibre features and gene expression in Maremmana and Aubrac steers</i> | O014 |
| 09.15-09.30 | <u>Mario Barbato</u> , Elia Vajana, Elisa Somenzi, Oliver Selmoni, Marcello Del Corvo, Michèle Tixier-Boichard, Stéphane Joost, Barbara Lazzari, Alessandra Stella, Paolo Ajmone Marsan <i>Deciphering climate-mediated adaptation in European sheep</i> | O015 |
| 09.30-09.45 | <u>Rosalia Di Gerlando</u> , Ilaria Rizzuto, Marco Tolone, Angelo Moscarelli, Maria Teresa Sardina <i>Prion protein (PRNP) gene polymorphisms in Valle del Belice sheep breed</i> | O016 |
| 09.45-10.00 | <u>Piero Franceschi</u> , Paolo Formaggioni, Francesca Vighi, Elena Bortolazzo, Massimo Malacarne <i>Physico-chemical characteristics of milk from autochthonous cattle breeds of the Emilia Romagna region</i> | O017 |

Wednesday, September 22nd - Room Palladio

09:00 - 10:30

SESSION 4 - Nutritional profile of food - I

Chairs: Massimiliano Petracci, Angela Trocino

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| 09.00-09.30 | Invited Lecture Frédéric Leroy <i>Animal source foods in the 21st century - obsolete or essential?</i> | IS008 |
| 09.30-09.45 | <u>Alice Cartoni Mancinelli</u> , Alessandro Dal Bosco, Elisa Angelucci, Claudia Ciarelli, Castellini Cesare <i>Lipid metabolism in different Italian poultry breed and crossbreed</i> | O018 |
| 09.45-10.00 | <u>Nicolo' Amalfitano</u> , Mohamed-Laid Haddi, Hamida Benabid, Franco Tagliapietra <i>Detailed mineral profile of milk from cows, buffaloes, goats, sheep, dromedary camels, and donkeys and minerals recovery in cheese</i> | O019 |
| 10.00-10.15 | <u>Elena Mariani</u> , Anna Lante, Claudio Cipolat-Gotet, Giovanna Lomolino, Federica Tinello, Massimo Malacarne, Andrea Summer <i>Animal and environmental effects on protease and lipase activity of bovine milk</i> | O020 |
| 10.15-10.30 | <u>Vittoria Bisutti</u> , Alice Vanzin, Alessandro Toscano, Lucio Flavio Macedo Mota <i>Associations among somatic cell count, differential somatic cell count and milk protein profile in Holstein cattle</i> | O021 |

Wednesday, September 22nd - Room Galileo

11:00 - 12:00

SESSION 5 - Alternative feeds and waste recycling - II

Chairs: G. Matteo Crovetto, Biagina Chiofalo

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| 11.00-11.15 | <u>Francesco Serrapica</u> , Felicia Masucci, Maura Sannino, Salvatore Faugno, Claudia Lambiase, Antonio Di Francia <i>Peanut (<i>Arachis hypogaea</i>) crop within a circular economy perspective: potential use of biomass as forage</i> | O022 |
| 11.15-11.30 | <u>Sheyla Arango</u> , Elisabetta Bacchin, Federico Fontana, Massimo Montanari, Lucia Bailoni <i>Agronomical traits and chemical characterization of whole plant and botanical fractions of six varieties of hemp cultivated in the Veneto region</i> | O023 |
| 11.30-11.45 | <u>Andrea Rota Graziosi</u> , Stefania Colombini, Gianni Matteo Crovetto, Gianluca Galassi, Maria Chiaravalli, Marco Battelli, Luca Rapetti <i>Partial replacement of soybean meal with self-produced whole-plant soybean silage in lactating dairy cows diet</i> | O024 |
| 11.45-12.00 | <u>Doriana E.A. Tedesco</u> , Sveva Scarioni, Aldo Tava <i>Biorefinery approach to valorise vegetable waste from the wholesale market</i> | O025 |

Wednesday, September 22nd - Room Giotto
11:00 - 12:30

**SESSION 6 -Management strategies to improve animal health,
welfare and resilience - II**

Chairs: Flaviaiana Gottardo, Martina Tarantola

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| 11.00-11.15 | <u>Sara Pegolo</u> , Rossella Tessari, Enrico Fiore, Matteo Giancesella, Diana Giannuzzi, Riccardo Negrini, Alessio Cecchinato <i>Quarter-level analysis of mastitis infection and relationships with milk traits in Holstein cattle</i> | O026 |
| 11.15-11.30 | <u>Basilio Randazzo</u> , Matteo Zarantoniello, Roberto Cerri, Giorgia Gioacchini, Maria Messina, Alessia Belloni, Enrico Daniso, Emilio Tibaldi, Ike Olivotto <i>Effects of microalgae and insect meal supplementation to diets high in soybean meal, deprived of fish meal, on gut health of seabass (<i>D. labrax</i>) and sea bream (<i>S. aurata</i>)</i> | O027 |
| 11.30-11.45 | Aristide Maggiolino, Nicola Bartolomeo, Umberto Bernabucci, Attilio Rossoni, Vincenzo Landi, <u>Pasquale De Palo</u> <i>Heat waves effects on Italian Brown Swiss milk production</i> | O028 |
| 11.45-12.00 | <u>Francesca Rita Dinardo</u> , Elisabetta Casalino, Grazia Maria Liuzzi, Giovanna Calzaretti, Pasquale De Palo <i>Dietary supplementation with nucleotides in calves: effects on oxidative balance and immune response</i> | O029 |
| 12.00-12.15 | <u>Silvia Carta</u> , Eleni Tsiplakou, Christina Mitsiopoulou, Giuseppe Pulina <i>The effect of cocoa husks supplementation on fatty acids profile and blood and milk antioxidant status of dairy ewes</i> | O030 |
| 12.15-12.30 | <u>Paolo Trevisi</u> , Diana Luise, Federico Correa, Marika Vitali, Elisa Spinelli, Roberta Ruggeri, Kristian Juul Volshøj, Jorn Munch Madsen, Mai Anh Ton Nu, Paolo Bosi <i>Effect of two different ways for milk replacer administration on the growth performance and welfare of piglets</i> | O031 |

Wednesday, September 22nd - Room Petrarca
11:00 - 12:30

SESSION 7 - Genomic and phenomic tools to improve livestock animals - I

Chairs: Alessio Cecchinato, Martina Zappaterra

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| 11.00-11.30 | <i>Invited Lecture</i> Joao Reboucas Dorea <i>Harnessing the Power of Computer Vision System to Improve Management Decisions in Livestock Operations</i> | IS009 |
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| 11.30-11.45 | <u>Giacomo Rovelli</u> , Maria Gracia Luigi Sierra, Simone Ceccobelli, Dailu Guan, Francesco Perini, Fiorella Sbarra, Andrea Quaglia, Marcel Amills Eras, Emiliano Lasagna <i>A genome wide association study for beef production traits in five Italian cattle breeds</i> | O032 |
| 11.45-12.00 | <u>Vincenzo Landi</u> , Gabriele Senczuk, Marco Ragni, Simona Taricone, Francesco Giannico, Francesca Maria Sarti, Emiliano Lasagna, Luigina Rillo, Giuseppe Marsico, Christian Persichilli, Samira Giovannini, Domato Matassino, Elena Ciani, Fabio Pilla <i>Complex genetic pattern supported by genome wide SNPs data in Mediterranean goat breeds</i> | O033 |
| 12.00-12.15 | <u>Marco Milanese</u> , Cinzia Marchitelli, Michela Contò, Simona Rinaldi, Danilo Pignotti, Giovanni Chillemi, Alessandra Crisà <i>Preliminary results of Genome Wide Association Study with milk functional molecules in different cow breeds</i> | O034 |
| 12.15-12.30 | Daniele Bigi, Nicola Rambaldi Migliore, Riccardo Negrini, Andrea Verini-Supplizi, Luigi Liotta, Antonio Torroni, Alessandro Achilli, <u>Licia Colli</u> <i>Donkey worldwide diversity based on control-region data and entire mitogenomes</i> | O035 |

Wednesday, September 22nd - Room Palladio
11:00 - 12:15

SESSION 8 - Nutritional profile of food - II

Chairs: Andrea Formigoni, Gianluca Neglia

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| 11.00-11.15 | <u>Chiara Ceccotti</u> , Simona Rimoldi, Federica Iannini, Genciana Terova <i>Evaluation of oil from Camelina sativa in feeds for gilthead sea bream (Sparus aurata): effects on fish growth, fillet fatty acid profile, and gut microbiota composition</i> | O036 |
| 11.15-11.30 | <u>Cinzia Marchitelli</u> , Daniele Pietrucci, Marco Milanese, Luca Casadei, Fernando Porcelli, Giovanni Chillemi, Alessandra Crisà <i>Evaluation of milk quality in different cow breeds by biological markers</i> | O037 |
| 11.30-11.45 | <u>Amalia Simonetti</u> , Giulia Grassi, Emilio Gambacorta, Annamaria Perna <i>Antioxidant capacity and polyphenol content of goat milk: comparison among autochthonous breeds</i> | O038 |
| 11.45-12.00 | <u>Martina Di Corcia</u> , Marzia Albenzio, Antonella della Malva, Mariangela Caroprese, Maria Giovanna Ciliberti, Antonella Santillo, Agostino Sevi, Rosaria Marino <i>Fatty acid profile and endogenous bioactive compounds of beef as affect by duration of linseed supplementation</i> | O039 |
| 12.00-12.15 | <u>Maria Francesca Guiso</u> , Giorgia Serra, Antonio Fenu, Anna Nudda <i>Colostrum composition of Sarda Dairy Ewes</i> | O040 |

Wednesday, September 22nd - Room Galileo
14:00 - 15:30

SESSION 9 – Non-conventional livestock systems

Chairs: Maurizio Ramanzin, Luca Maria Battaglini

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| 14.00-14.30 | Invited Lecture Daniel Martin Collado <i>Best practices for targeted policies to enhance ecosystem services in European livestock agroecosystems</i> | IS010 |
| 14.30-14.45 | <u>Ginevra Nota</u> , Roberta Berretti, Marco Pittarello, Davide Barberis, Davide Ascoli, Simone Ravetto Enri, Dino Genovese, Paolo Cornale, Giampiero Lombardi, Michele Lonati, Renzo Motta, Luca Maria Battaglini <i>Food For Forest: an integrative silvi-pastoral system with semi-free-ranging pigs</i> | O041 |
| 14.45-15.00 | <u>Amanda McPherson</u> , Enrico Sturaro, Maurizio Ramanzin, Andrea Squartini, Salvatore Raniolo, Dorcas H. Franklin, Giuseppe Concheri <i>Investigating dairy grazing patterns and soil microbial trends in the nitrogen cycle across traditional mountain landscapes</i> | O042 |
| 15.00-15.15 | <u>Salvatore Raniolo</u> , Maurizio Ramanzin <i>Human choices, slope, and vegetation productivity determine pattern of traditional Alpine summer grazing</i> | O043 |
| 15.15-15.30 | <u>Andrea Confessore</u> , Chiara Aquilani, Lapo Nannucci, Edoardo Bellini, Camilla Dibari, Giovanni Argenti, Nicolina Staglianò, Marco Moriondo, Paola Semenzato, Sandro Nicoloso, Carolina Pugliese <i>Application of Virtual Fencing for the management of Limousine cows at pasture during spring-summer season: preliminary results</i> | O044 |

Wednesday, September 22nd - Room Giotto
14:00 - 15:30

SESSION 10 - Management strategies to improve animal health, welfare and resilience - III

Chairs: Leonardo Nanni Costa, Silvana Mattiello

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| 14.00-14.15 | <u>Alessio Cotticelli</u> , Angela Salzano, Anna Balestrieri, Pasquale Scala, Giacomo Bertolini, Oscar Tamburis, Gianluca Neglia <i>Relationship among production traits, milk conductivity, somatic cell score and THI in the Italian Mediterranean Buffalo</i> | O045 |
| 14.15-14.30 | <u>Alessandra Nicolao</u> , Claire Mosnier, Bruno Martin, Dominique Pomies, Enrico Sturaro <i>Suckling of dairy calves by their dams: trade-off between ethical and economic sustainability</i> | O046 |
| 14.30-14.45 | <u>Giovanna Ranzato</u> , Maria Costanza Galli, Giulio Cozzi <i>Modeling of milk fatty acids profiles in Holstein dairy cows during early and mid lactation</i> | O047 |

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| 14.45-15.00 | Patrizia Di Marco, Donatella Volpatti, Valeria Donadelli, Alberta Mandich, Alessandro Longobardi, Tommaso Petoichi, Maria Grazia Finoia, Gloriana Cardinaletti, <u>Giovanna Marino</u> <i>Growth performance and welfare status of gilthead sea bream (<i>Sparus aurata</i>) fed low fish meal diets</i> | O048 |
| 15.00-15.15 | <u>Diana Luise</u> , Paolo Trevisi, Tristan Chalvon-Demersay, Paolo Bosi <i>Description of the effects of reducing protein content diet on piglets post-weaning intestinal health: a meta-analysis</i> | O049 |
| 15.15-15.30 | <u>Mayra Gómez Carpio</u> , Dario Rossi, Gianluigi Zullo, Damiano Altieri, Roberta Cimmino <i>Preliminary investigations on functional longevity in Italian Mediterranean Buffaloes (<i>Bubalus bubalis</i>)</i> | O050 |

Wednesday, September 22nd - Room Petrarca
14:00 - 15:45

SESSION 11 - Genomic and phenomic tools to improve livestock animals - II

Chairs: Roberto Mantovani, Riccardo Bozzi

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| 14.00-14.30 | <i>Invited Lecture</i> Ignacy Misztal <i>Genomic tools to improve livestock</i> | IS011 |
| 14.30-14.45 | <u>Samuele Fontanesi</u> , Giuseppina Schiavo, Mohamad Ballan, Matteo Bolner, Luca Fontanesi <i>Mining livestock genomes for a One Health perspective in the management of animal genetic resources</i> | O051 |
| 14.45-15.00 | <u>Lucio Flavio Macedo Mota</u> , Gota Morota, Francisco Peñagaricano, Alessio Cecchinato <i>Machine learning and variable selection methods for Fourier transform infrared prediction in Holstein cattle</i> | O052 |
| 15.00-15.15 | <u>Fabio Correddu</u> , Giustino Gaspa, Nicolò P.P. Macciotta <i>Non coagulating sheep milk characterization through Fourier-Transform IR spectroscopy</i> | O053 |
| 15.15-15.30 | <u>Sara Faggion</u> , Massimiliano Babbucci, Giulia Dalla Rovere, Rafaella Franch, Matteo Freguglia, Luca Bargelloni, Daniela Bertotto <i>Genomic prediction of VNN resistance, body weight, cortisol concentration and antibody titer in European sea bass (<i>Dicentrarchus labrax</i> L.)</i> | O054 |
| 15.30-15.45 | <u>Valentina Bonfatti</u> , Elena Boschi, Paolo Carnier <i>Genomic prediction of dry-cured ham weight loss in Italian heavy pigs</i> | O055 |

Wednesday, September 22nd - Room Palladio
14:00 - 15:30

SESSION 12 - Food production and processing

Chairs: Marcello Mele, Andrea Summer

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| 14.00-14.15 | <u>Giulia Baldi</u> , Fabio D'Elia, Urszula Tylewicz, Massimiliano Petracci <i>Innovative approach for the tenderization of Wooden Breast meat in broilers</i> | O056 |
| 14.15-14.30 | <u>Simone Mancini</u> , Simona Mattioli, Alice Cartoni Mancinelli, Roberta Nuvoloni, Gisella Paci <i>Effects of rosemary powder and salt additions in goose meat burgers</i> | O057 |
| 14.30-14.45 | <u>Roxana Elena Amarie</u> , Sara Tinagli, Laura Casarosa, Giulia Foggi, Monica Tognocchi, Andrea Serra <i>Effects of cooking with Superheated Steam on organic Maremmana breed beef</i> | O058 |
| 14.45-15.00 | <u>Isaac Hyeladi Malgwi</u> , Paolo Carnier, Celio Paolo Sasso, Veronika Halas, Stefano Schiavon <i>Innovative feeding strategies for the heavy pig: effects on technological and quality traits of dry-cured hams</i> | O059 |
| 15.00-15.15 | <u>Giorgia Stocco</u> , Michele Pazzola, Maria Luisa Dettori, Andrea Summer, Giuseppe Massimo Vacca <i>Goat milk-based predictive formulas for different measures of cheese yield</i> | O060 |
| 15.15-15.30 | <u>Giulia Grassi</u> , Amalia Simonetti, Emilio Gambacorta, Annamaria Perna <i>Effect of species on oxidative stability of ozone treated milk cream</i> | O061 |

Thursday, September 23rd - Room Galileo
09:00 - 10:30

SESSION 13 - Monitoring and mitigating impacts on environment - I

Chairs: Umberto Bernabucci, Enrico Sturaro

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| 09.00-09.15 | <u>Sara Carè</u> , Giacomo Pirlo, Luciano Migliorati <i>Environmental impact of Italian beef suckler to finish system</i> | O062 |
| 09.15-09.30 | <u>Marco Berton</u> , Stefano Schiavon, Luigi Gallo <i>Polluting compounds in Po Valley dairy system: amount, variation and some determinants in Veneto region farms</i> | O063 |
| 09.30-09.45 | <u>Gustavo Javier Martínez Marín</u> , Giovanni Bittante, Hugo Toledo-Alvarado <i>Effect of breed, farm intensiveness and cow productivity on predicted enteric methane emissions predicted at the population level</i> | O064 |
| 09.45-10.00 | <u>Andrea Vitali</u> , Giampiero Grossi, Nicola Lacetera <i>Effect of summer cooling of dairy cows on carbon and water footprint intensity of milk</i> | O065 |

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| 10.00-10.15 | <u>Giulia Gislon</u> , Ernesto Tabacco, Maria Teresa Pacchioli, Alberto Tamburini, Anna Sandrucci <i>Farm level mitigation strategies to improve sustainability of milk production: effects on GHG emissions</i> | O066 |
| 10.15-10.30 | <u>Valentina Ferrari</u> , Maurizio Marusi, Martino Cassandro <i>A tool to efficiently replace dairy heifers using genomic information</i> | O067 |

Thursday, September 23rd - Room Giotto
08:30 - 10:30

SESSION 14 - Breeding strategies to improve animal health, welfare and resilience

Chairs: Fabio Pilla, Valentina Bonfatti

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| 08.30-09.00 | <i>Invited Lecture</i> Augustin Blasco <i>New challenges: Global warming, welfare, resilience. How can genetics help?</i> | IS012 |
| 09.00-09.15 | <u>Giustino Gaspa</u> , Roberto Steri, Lorenzo Degano, Daniele Vicario <i>Lifetime profitability assessed through multivariate health index measured on primiparous Italian Simmental cows</i> | O068 |
| 09.15-09.30 | <u>Angela Costa</u> , Marco Franzoi, Arianna Goi, Giulio Visentin, Massimo De Marchi <i>Genetic aspects of immunoglobulins G concentration measured with gold standard and predicted from infrared spectra in bovine colostrum</i> | O069 |
| 09.30-09.45 | <u>Raffaella Finocchiaro</u> , Jan-Thijs van Kaam, Valentina Ferrari <i>Genetic Modelling of Heat Stress in Italian Holstein cows</i> | O070 |
| 09.45-10.00 | <u>Anna Fabris</u> , Mauro Penasa, Tania Bobbo <i>Implementation of SCC breeding values in Italian Jersey breed</i> | O071 |
| 10.00-10.15 | <u>Giulio Visentin</u> , Giovanni Buonaiuto, Angela Costa, Yari Vecchio, Ferdinando Galluzzo, Maurizio Marusi <i>Development of a selection index for resistance to subclinical ketosis in Holstein Friesian dairy cows</i> | O072 |
| 10.15-10.30 | <u>Matilde Maria Passamonti</u> , Mario Barbato, Johanna Ramirez-Diaz, Michele Premi, Alessandra Stella, John Lewis Williams, Paolo Ajmone-Marsan <i>Can SNPs associated to the variation of stress biomarkers be used for the selection of stress resilient dairy cows?</i> | O073 |

Thursday, September 23rd - Room Petrarca
08:30 - 09:45

SESSION 15 - Feed efficiency and growth performance - I

Chairs: Erminio Trevisi, Severino Segato

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| 08.30-08.45 | <u>Vincenzo Lopreiato</u> , Giulia Ferronato, Giorgia Lovotti, Erminio Trevisi <i>Residual feed intake and its association with growth performance and blood metabolic profile in preweaning Simmental calves</i> | O074 |
| 08.45-09.00 | <u>Alberto Romanzin</u> , Lorenzo Degano, Daniele Vicario, Mauro Spanghero <i>Residual feed intake of Italian Simmental bulls in performance test</i> | O075 |
| 09.00-09.15 | <u>Ilaria Biasato</u> , Giulia Chemello, Ilario Ferrocino, Christian Caimi, Aman Paul, Monika Dalim, Michel van Spankeren, Maria Teresa Capucchio, Elena Colombino, Luca Cocolin, Francesco Gai, Achille Schiavone, Laura Gasco <i>Growth performance and gut health of rainbow trout fed commercial diets containing black soldier fly larva meal</i> | O076 |
| 09.15-09.30 | <u>Matteo Daglio</u> , Francesca Ciucci, Carlo Viti, Breanne M. McAmmond, Jonathan D. Van Hamme, Federica Mannelli, Federica Scicutella, Arianna Buccioni <i>Rumen microbiota and growth performance in Aubrac and Maremmana steers reared in pasture and in feedlot</i> | O077 |
| 09.30-09.45 | <u>Alice Luciano</u> , Marco Tretola, Michele Manoni, Nicoletta Rovere, Sharon Mazzoleni, Francesca Fumagalli, Luciano Pinotti <i>Effect of salty or sweet food leftover-based diets on growth performance and digestibility in piglets</i> | O078 |

Thursday, September 23rd - Room Palladio
09:00 - 10:30

SESSION 16 - Food sensory quality, labelling and valorization

Chairs: Massimo Malacarne, Adriana Bonanno

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| 09.00-09.15 | <u>Ambra Rita Di Rosa</u> , Marianna Oteri, Vittorio Lo Presti, Chiofalo Biagina <i>Feed Insects For Aquaculture. Use of Hermetia illucens L. meal for Sparus aurata L.: Emerging trends of advanced sensor-based instruments (E-eye, E-nose, E-tongue) for fish quality</i> | O079 |
| 09.15-09.30 | <u>Federico Nassivera</u> , Emilio Tibaldi, Rodolfo Ballestrazzi, Luca Iseppi <i>To eat or not to eat: consumer behavior towards sustainable fish</i> | O080 |
| 09.30-09.45 | <u>Pier Paolo Danieli</u> , Lorenzo Romagnoli, Andrea Amici, Bruno Ronchi, Giuseppe Russo, Riccardo Primi, Marco Lauteri <i>Effects of diets with different protein sources on carbon and nitrogen isotopic signatures in Hermetia illucens: potential zootechnical implications and traceability of insect meals</i> | O081 |

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| 09.45-10.00 | <u>Aristide Maggiolino</u> , Giovanna Calzaretti, Maria Federica Sgarro, Gerardo Centoducati, Francesco Giannico, Andrea Bragaglio <i>Dry vs Vacuum aging in horse meat: oxidative stability and volatolomic profile</i> | O082 |
| 10.00-10.15 | <u>Silvia Parrini</u> , Francesco Sirtori, Alessandro Crovetto, Maria Chiara Fabbri, Riccardo Bozzi <i>Potential use of near infrared spectra from meat and fat samples for the identification of autochthonous pig breeds</i> | O083 |
| 10.15-10.30 | <u>Ilaria Lanza</u> , Andrea Massaro, Alessandra Tata, Alessandro Negro, Marco Bragolusi, Roberto Piro, Lorenzo Serva, Barbara Contiero, Severino Segato <i>High-alpine forage milk characterization by DART-HRMS signatures</i> | O084 |

Thursday, September 23rd - Room Galileo
11:00 - 12:30

SESSION 17 - Monitoring and mitigating impacts on environment - II

Chairs: Mauro Spanghero, Paolo Bani

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| 11.00-11.30 | <i>Invited Lecture</i> Maurizio Ramanzin <i>Environmental sustainability of livestock systems: going beyond impacts?</i> | IS013 |
| 11.30-11.45 | <u>Anna Simonetto</u> , Davide Gibin, Barbara Zanini, Valentina Caprarulo, Gianni Gilioli <i>A general framework for the assessment of environmental impact of food: an application to six healthy dietary patterns</i> | O085 |
| 11.45-12.00 | <u>Franco Tagliapietra</u> , Sara Pontini <i>Comparison of different models to predict methane emission from milk fatty acids in dairy cows</i> | O086 |
| 12.00-12.15 | <u>Matteo Braidot</u> , Alessandro Lotto, Nicola Martinelli, Chiara Sarnataro, Carla Fabro, Mauro Spanghero <i>Kinetics of rumen methane production in in vitro system</i> | O087 |
| 12.15-12.30 | <u>Mondina Francesca Lunesu</u> , Paola Sau, Fabio Correddu <i>Carbon footprint of fully and partially indoor dairy goat farming systems in Sardinia: a comparison between IPCC 2006 and IPCC 2019 prediction methods</i> | O088 |

Thursday, September 23rd - Room Giotto

11:00 - 12:30

SESSION 18 - Behaviour and welfare

Chairs: Marta Brscic, Fabio Napolitano

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| 11.00-11.15 | Laura Menchetti, Martina Zappaterra, Dabide Monaco, Leonardo Nanni Costa, <u>Barbara Padalino</u> <i>An innovative tool for assessing welfare of camels</i> | O089 |
| 11.15-11.30 | Alberto Cesarani, <u>Giuseppe Pulina</u> <i>Farm animals are long away from natural behavior: genetic and technical perspectives to improve welfare</i> | O090 |
| 11.30-11.45 | <u>Stefania Celozzi</u> , Monica Battini, Federica Manila Soli, Silvana Mattiello <i>Measuring feeding synchronization for welfare assessment in dairy farms</i> | O091 |
| 11.45-12.00 | Mauro Giammarino, Silvana Mattiello, Monica Battini, Piero Quatto, Luca Maria Battaglini, Ana Lopes Vieira, George Stilwell, <u>Manuela Renna</u> <i>Evaluation of inter-observer reliability of animal welfare indicators: which is the best index to use?</i> | O092 |
| 12.00-12.15 | Maria Costanza Galli, Annalisa Scollo, Barbara Contiero, Isabella Lora, <u>Flaviana Gottardo</u> <i>Alternative farrowing systems for sows can affect litters performance?</i> | O093 |
| 12.15-12.30 | <u>Fabrizio Pirrone</u> , Cristina Zomeño, Francesco Bordignon, Angela Trocino <i>Hopping displacements of rabbit does kept in a collective housing system</i> | O094 |

Thursday, September 23rd - Room Petrarca

11:00 - 12:30

SESSION 19 - Feed efficiency and growth performance - II

Chairs: Stefano Schiavon, Antonello Cannas

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| 11.00-11.15 | <u>Matteo Dell'Anno</u> , Carlotta Giromini, Serena Reggi, Tamil Selvi Sundaram, Simona Coranelli, Ambra Spalletta, Luciana Rossi <i>Evaluation of Lactobacillus plantarum and Lactobacillus reuteri as feed additives for swine</i> | O095 |
| 11.15-11.30 | <u>Marco Zampiga</u> , Giorgio Brugaletta, Stefano Pignata, Federico Sirri <i>Effects of dietary metabolizable energy content on productive performance of turkeys</i> | O096 |
| 11.30-11.45 | <u>Marco Birolo</u> , Anton Pascual Guzman, Giulio Pillan, Fabrizio Pirrone, Andrea Zuffellato, Gerolamo Xiccato <i>Effect of genotype and feeding plan on growth performance, slaughter results and meat quality of growing rabbits</i> | O097 |

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| 11.45-12.00 | <u>Damiano Cavallini</u> , Alessandro Concolino, Emanuela Valle, Luca Campidonico, Isa Fusaro, Ludovica Mammi, Andrea Formigoni <i>Effects of different lipid sources and tannins on performances of high producing dairy cows</i> | O098 |
| 12.00-12.15 | <u>Federico Moroni</u> , Simona Rimoldi, Fabio Brambilla, Genciana Terova <i>Evaluation of lactic acid bacteria as probiotics for gilthead sea bream (<i>Sparus aurata</i>): effects on growth and intestinal morphology, transcriptional response, and microbiota</i> | O099 |
| 12.15-12.30 | <u>Paolo Bani</u> , Andrea Fiorini, Fiorenzo Piccioli-Cappelli, Olga Gachiuta <i>Effects of ensiling treatments on the fermentation profile of pulp and stem fractions after green biorefining of alfalfa</i> | O100 |

Thursday, September 23rd - Room Palladio
11:00 - 12:30

SESSION 20 - Feed effects on nutritional profile animal products - I

Chairs: Serena Calabrò, Marco Cullere

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| 11.00-11.15 | <u>Camilla Pomente</u> , Ruggero Menci, Bernardo Valenti, Gianluca Veneziani, Mariano Pauselli, Luciano Morbidini <i>Dietary olive pomace: effects on meat and back-fat quality traits in heavy pigs</i> | O101 |
| 11.15-11.30 | <u>Giuseppe Conte</u> , Eleonora Longo, Sara Tinagli, Roxana Elena Amarie, Monica Tognocchi <i>Linseed supplementation in the diet of fattening pigs: effect on the fatty acid profile of different meat cuts</i> | O102 |
| 11.30-11.45 | <u>Lina Fernanda Pulido Rodriguez</u> , Giulia Secci, Francesco Gai, Giulia Maricchiolo, Giuliana Parisi <i>Effect of dietary <i>Hermetia illucens</i> larvae meal on triglyceride composition of sea bream fillets</i> | O103 |
| 11.45-12.00 | <u>Giulia Secci</u> , Lina Fernanda Pulido Rodriguez, Adja Cristina Lira de Medeiros, Giuliana Parisi <i>Alternative protein sources in aquafeeds for rainbow trout: overview on fillet quality modifications</i> | O104 |
| 12.00-12.15 | <u>Nadia Piscopo</u> , Domenico Rufrano, Roberta Matera, Carmelina Lovallo, Salvatore Claps, Lucia Sepe, Angela Salzano <i>Productive performance and meat characteristics of kids fed anthocyanes</i> | O105 |
| 12.15-12.30 | <u>Simona Mattioli</u> , Elisa Angelucci, Claudia Ciarelli, Alessandro Dal Bosco, Cesare Castellini <i>Effect of dietary alpha-linolenic acid on meat quality of Italian poultry breed and crossbreed</i> | O106 |

Wednesday, September 22nd - Room Galileo
14:00 - 15:30

SESSION 21 - Precision livestock farming - I

Chairs: Giorgio Marchesini, Fabio Abeni

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| 14.00-14.30 | <i>Invited Lecture</i> Ilan Halachmi <i>title to be defined</i> | IS014 |
| 14.30-14.45 | <u>Maddalena Zucali</u> , Giulia Gislon, Milena Brasca, Serena Bonizzi, Luciana Bava, Stefano Morandi, Anna Sandrucci <i>Pre-weaned dairy calf housing: preliminary results on microbial air contamination</i> | O107 |
| 14.45-15.00 | <u>Giorgio Marchesini</u> , Paolo Balasso, Nicola Ughelini <i>The left side flank as source of information for animal behaviour and welfare in dairy cow</i> | O108 |
| 15.00-15.15 | <u>Colomba Sermoneta</u> , Andrea Serra, Gianluca Brunori <i>The livestock sector digitalization: indicators on livestock's farming digital performance</i> | O109 |
| 15.15-15.30 | <u>Giulia Ferronato</u> , Michele Premi, Andrea Minuti, Olga Gachiuta, Paolo Bani <i>Near-Infrared Spectroscopy for the prediction of plasma parameters for Liver Functionality Index in dairy cows</i> | O110 |

Wednesday, September 22nd - Room Giotto
14:00 - 15:30

SESSION 22 - Free Communications

Chairs: Massimo De Marchi, Gianni Battacone

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| 14.00-14.15 | <u>Carmine Versace</u> , Jiang-Hua Shang, Ling-Yu Li, Angela Perucatti, Liliana Di Stasio, Alfredo Pauciullo <i>Aneuploidy detection in Murrah buffalo MII oocytes by tri-colour FISH</i> | O111 |
| 14.15-14.30 | <u>Luca Ferrari</u> , Matteo Ottoboni, Francesco Defilippo, Paolo Bonilauri, Robin Ørnsrud, Luciano Pinotti <i>Hermetia illucens reared on selenium enriched substrates for designing fortified insect meal</i> | O112 |
| 14.30-14.45 | Matteo Santinello, <u>Alessia Diana</u> , Federico Scali, Giovanni Loris Alborali, Luigi Bertocchi, Valentina Lorenzi, Massimo De Marchi <i>Management strategies reduce antimicrobial use in Italian beef farms</i> | O113 |
| 14.45-15.00 | <u>Matteo Santinello</u> , Alessia Diana, Federico Scali, Giovanni Loris Alborali, Luigi Bertocchi, Mauro Penasa <i>Effect of mixing animals in France on the use of antimicrobials in Italian beef fattening farms</i> | O114 |

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| 15.00-15.15 | <u>Maria Rita Mellino</u> , Federico Correa, Catherine Ollagnier, Giuseppe Bee, Gianni Battacone <i>Response of weaned piglet's gut microbiota to the dietary inclusion of different doses of extracted olive oil wastewater</i> | O115 |
| 15.15-15.30 | <u>Riccardo Negrini</u> <i>LEO project: developing a national open data repository to support livestock biodiversity, health, sustainability, and welfare</i> | O116 |

Wednesday, September 22nd - Room Petrarca 14:00 - 15:30

SESSION 23 - Genomics of local breeds

Chairs: Baldassare Portolano, Emiliano Lasagna

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| 14.00-14.30 | <i>Invited Lecture</i> Paolo Ajmone Marsan <i>Livestock biodiversity in the genomic era</i> | IS015 |
| 14.30-14.45 | <u>Gabriele Senczuk</u> , Slim Ben-Jemaa, Fabio Pilla, Johannes A. Lenstra, Meng-Hua Li, Elena Ciani <i>Genome-wide diversity of African and Eurasian fat-tailed sheep</i> | O117 |
| 14.45-15.00 | <u>Beniamino Tuliozi</u> , Enrico Mancin, Roberto Mantovani, Alessandro Bagnato, Maria Giuseppina Strillacci, Mario Vevey, Cristina Sartori <i>GWAS of fitness and productive traits in the local Valdostana breeds</i> | O118 |
| 15.00-15.15 | Slim Ben-Jemaa, Roberta Ciampolini, Gennaro Catillo, Mekki Boussaha, <u>Salvatore Mastrangelo</u> <i>Genome-wide search of distinctiveness selection signatures in Maremmana cattle compared to Italian Podolian-derived breeds</i> | O119 |
| 15.15-15.30 | <u>Marco Tolone</u> , Domenico Giosa, Rosalia Di Gerlando, Anna Maria Sutura, Angelo Moscarelli, Ilaria Rizzuto, Baldassare Portolano, Salvatore Mastrangelo <i>Whole-genome resequencing reveals specific genomic variants in Italian insular sheep breeds</i> | O120 |

Wednesday, September 22nd - Room Palladio 14:00 - 15:30

SESSION 24 - Feed effects on nutritional profile of animal products - II

Chairs: Giovanni Bittante, Antonella Baldi

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| 14.00-14.15 | <u>Federica Mannelli</u> , Matteo Daghigho, Roberta Pastorelli, Carlo Viti, Maria Alexandra Cucu, Luca Turini, Federica Scicutella, Arianna Buccioni <i>Milk nutritional quality and rumen microbial community of Holstein-Friesian cows fed a diet supplemented with olive oil pomace</i> | O121 |
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| 14.15-14.30 | <u>Giorgia Secchi</u> , Nicolò Amalfitano, Ilaria Carafa, Kieran Michael Tuohy, Elena Franciosi, Giovanni Bittante <i>Metagenomics of milk before, during and after summer transhumance to highland pasture in relation to human health and cheese making properties</i> | O122 |
| 14.30-14.45 | Antonino Di Grigoli, Marialetizia Ponte, Riccardo Gannuscio, Margherita Addis, Marco Alabiso, Giuseppe Maniaci, Monica Bacchi, Massimo Todaro, <u>Adriana Bonanno</u> <i>Dehydrated sulla forage in dairy ewes feeding: effects on cheese properties</i> | O123 |
| 14.45-15.00 | <u>Elisabetta Bacchin</u> , Nadia Guzzo, Lucia Bailoni <i>Use of different levels of hemp meal supplementation in diets of veal calves: effects on in vivo performances and metabolic profile</i> | O124 |
| 15.00-15.15 | <u>Mengjun Wu</u> , Siria Tavaniello, Sanije Zejnelhoxha, Antonella Fatica, Marisa Palazzo, Elisabetta Salimei, Giuseppe Maiorano <i>Effect of genotype and diet on carcass and meat quality traits of broiler chickens</i> | O125 |
| 15.15-15.30 | Silvia Carta, Eleni Tsiplakou, <u>Anna Nudda</u> <i>Novel by-products in goat nutrition: effect on milk yield and composition</i> | O126 |

Thursday, September 23rd - Room Galileo
16:00 - 16:45

SESSION 25 - Precision livestock farming - II

Chairs: Paolo Berzaghi, Pasquale De Palo

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| 16.00-16.15 | <u>Lorenzo Serva</u> , Giacomo Bison, Mattia Zago, Giorgio Marchesini, Igino Andrighetto <i>Use of a portable NIR instrument as a rapid tool for cattle feeding control</i> | O127 |
| 16.15-16.30 | <u>David Meo Zilio</u> , Miriam Iacurto, Francesco Cenci, Roberto Steri <i>Precision Buffalo Farming: preliminary results from the AGRIDIGIT project</i> | O128 |
| 16.30-16.45 | <u>Pier Paolo Danieli</u> , Giuseppe Bianchi, Marco Maerini, Gabriele Locci, Filippo Lazzari, Gianluca Piovesan <i>Precision livestock farming and beekeeping: development and testing of a prototypal smart hive</i> | O129 |

Thursday, September 23rd - Room Giotto
16:00 - 16:45

SESSION 26 - Omics technologies - I

Chairs: Giuseppe Conte, Sara Pegolo

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| 16.00-16.15 | Barbara Lazzari , Gianluigi Paolillo , Maria Grazia De Iorio , Rita Rizzi , Gustavo Gandini , <u>Giulietta Minozzi</u> <i>An alternative method to identify Csd alleles of the honey bees based on NGS data</i> | O130 |
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| 16.15-16.30 | <u>Martina Zappaterra</u> , Paolo Zambonelli , Anna Maria Belmonte , Giovanna Minelli , Domenico Pietro Lo Fiego <i>Investigating the effects of diets enriched in PUFA and antioxidants on the gene expression networks and intramuscular fatty acid composition in porcine Longissimus thoracis et lumborum muscle</i> | O131 |
| 16.30-16.45 | <u>Martina Bordini</u> , Francesca Soglia , Adele Meluzzi , Roberta Davoli <i>Weighted Gene Co-Expression Network Analysis identifies the main gene networks and biological pathways associated to chicken Pectoralis major myopathies</i> | O132 |

Thursday, September 23rd - Room Petrarca
16:00 - 17:00

SESSION 27 - Quantitative approaches, inbreeding and crossbreeding - I

Chairs: Mauro Penasa, Giustino Gaspa

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| 16.00-16.15 | <u>Ferdinando Galluzzo</u> , Raffaella Finocchiaro <i>Variance components estimation for milkability in Italian Holstein breed</i> | O133 |
| 16.15-16.30 | <u>Roberta Cimmino</u> , Dario Rossi, Gianluigi Zullo, Damiano Altieri, Yuri Gombia, Rossella Di Palo, Mayra Gomez Carpio <i>The relationship between somatic cell score and udder type traits in Italian Mediterranean Buffaloes (<i>Bubalus bubalis</i>)</i> | O134 |
| 16.30-16.45 | <u>Martina Piazza</u> , Luigi Gallo <i>Carcass value of purebred Holstein and crossbred cull cows from a 3 breed rotational scheme involving Viking Red, Montbéliarde, and Holstein bulls</i> | O135 |
| 16.45-17.00 | <u>Francesca Soglia</u> , Martina Bordini, Mattia Di Nunzio, Giulia Lattanzio, Adele Meluzzi, Maurizio Mazzoni, Massimiliano Petracchi <i>Implication of collagen type IV in the onset of breast muscle disorders in broilers</i> | O136 |

Thursday, September 23rd - Room Palladio
16:00 - 17:00

SESSION 28 – to be defined

Friday, September 24th - Room Galileo

09:00 - 10:30

SESSION 29 - Animal efficiency - I

Chairs: Franco Tagliapietra, Antonio Gallo

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| 09.00-09.15 | <u>Luisa Magrin</u> , Flaviana Gottardo, Chiara Mondin, Paola Prevedello, Samuele Trestini <i>Technical-economic analysis of ventilation systems used to mitigate heat stress in dairy cows</i> | O137 |
| 09.15-09.30 | Marica Simoni, Rosario Pitimo, Elisa Battaglia, Annamaria Paolino, Afro Quarantelli, <u>Federico Righi</u> <i>Assessment of ruminal and fecal microbial biomass and protein content and their relationship with the digestion indicators</i> | O138 |
| 09.30-09.45 | <u>Dimitrios Sioutas</u> , Antonio Mazza, Beatrice Pileri, Alessandra Marzano, Antonello Ledda, Antonello Cannas <i>Growth curve characteristics of dairy ewe-lambs of the Sarda breed from birth until start of mating age</i> | O139 |
| 09.45-10.00 | <u>Valentina Caprarulo</u> , Monika Hejna, Serena Reggi, Laretta Turin, Antonella Baldi, Luciana Rossi <i>Evaluation of phytochemical dietary supplements on O138 E. coli challenged piglets</i> | O140 |
| 10.00-10.15 | <u>Chiara Aquilani</u> , Lapo Nannucci, Martina Benedetti, Andrea Confessore, Silvia Parrini, Francesco Sirtori, Oreste Franci, Rosamaria Smaldone, Ilaria Paladini, Carolina Pugliese <i>Use of zeolite as zinc oxide replacement to control diarrhea in weaned pigs (from 8 to 20 kg): preliminary results on growth and microbiological profile of feces</i> | O141 |
| 10.15-10.30 | <u>Alessia Tondo</u> , Israel Flamenbaum, Mauro Fioretti, Lorenzo Pascarella <i>Summer-Winter index: a visual tool to monitor dairy cow response to heat stress at farm level</i> | O142 |

Friday, September 24th - Room Giotto

09:00 - 10:30

SESSION 30 - Omics technologies - II

Chairs: Roberta Davoli, Francesca Ciotola

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| 09.00-09.15 | Katia Cappelli, Gianpiero Marconi, Samanta Mecocci, Giorgia Mazza, Andrea Giontella, Emidio Albertini, <u>Stefano Capomaccio</u> <i>Epigenetic modifications in sports horses during training: analysis of genome-wide methylation as an adaptation phenomenon</i> | O143 |
| 09.15-09.30 | <u>Samanta Mecocci</u> , Stefano Capomaccio, Daniele Pietrucci, Katia Cappelli <i>OMIC characterization of cow, donkey and goat milk extracellular vesicles reveals their anti-inflammatory and immune-modulatory potential</i> | O144 |
| 09.30-09.45 | <u>Paolo Zambonelli</u> , Silvia Gioiosa, Marco Milanese, Tiziana Castrignanò, Roberta Davoli <i>SNPs and genes identification from muscle and backfat transcriptome of Italian Large White pigs with extreme and divergent fat deposition</i> | O145 |

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| 09.45-10.00 | <u>Daniele Pietrucci</u> , Daniele Alberoni, Loredana Baffoni, Diana Di Gioia, Giovanni Chillemi <i>Genomic and functional diversity of honey bee gut microbiota, after exposure to veterinary drugs or natural feed additives</i> | O146 |
| 10.00-10.15 | Fabio Omodei Zorini, Matteo Dell'Anno, Georgia Pennarossa, Paola Cremonesi, Bianca Castiglioni, Filippo Biscarini, <u>Guido Invernizzi</u> <i>Rumen and hindgut microbiomes of dairy Italian Holstein Friesian heifers fed with camelina sativa cake</i> | O147 |
| 10.15-10.30 | <u>Valentino Palombo</u> , Abdulrahman S. Alharthi, Fernanda Batistel, Mariasilvia D'Andrea, Claudia Parys, Jessie Guyader, Juan J. Loor <i>Adaptations in neonatal calf hepatic transcriptome in response to enhanced post-ruminal maternal supply of methionine</i> | O148 |

Friday, September 24th - Room Petrarca
09:00 - 10:30

SESSION 31 - Quantitative approaches, inbreeding and crossbreeding - II

Chairs: Paolo Carnier, Giuseppe Campanile

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| 09.00-09.15 | <u>Simone Ceccobelli</u> , Francesco Perini, Lorenzo Rosa, Maria Federica Trombetta, Marina Pasquini <i>Myostatin gene affects carcass and meat quality in Marchigiana beef cattle</i> | O149 |
| 09.15-09.30 | Nicolaia Iaffaldano, <u>Giusy Rusco</u> , Roberta Iampietro, Pier Paolo Gibertoni, Alessandra Roncarati, Michele Di Iorio <i>How post-collection storage time can affect the semen freezability of Mediterranean trout?</i> | O150 |
| 09.30-09.45 | <u>Hugo Toledo-Alvarado</u> , Gustavo Javier Martínez Marín <i>Genetic parameters of predicted enteric methane emissions of Brown Swiss cattle at the population level in Italy</i> | O151 |
| 09.45-10.00 | <u>Stefano Biffani</u> , Giuletta Minozzi, Maria Grazia Di Iorio, Giulio Pagnacco <i>Genetic Evaluation and Variance component estimation in an Italian honey bee population</i> | O152 |
| 10.00-10.15 | <u>Maria Chiara Fabbri</u> , Francesco Tiezzi, Alessandro Crovetto, Riccardo Bozzi <i>Genetic parameters for carcass weight at different age-classes in Italian Limousine beef cattle</i> | O153 |
| 10.15-10.30 | <u>Francesca Maria Sarti</u> , Samira Giovannini, Camillo Pieramati, Pancrazio Fresi, Silverio Grande <i>Merinizzata Italiana sheep breed: genetic gain after 20 years of Performance test</i> | O154 |

Friday, September 24th - Room Palladio
09:00 - 10:30

SESSION 32 - Companion animals and society - I

Chairs: Rebecca Ricci, Paola Crepaldi

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| 09.00-09.30 | Invited Lecture Marianne Diez <i>The evolution of proteins in the nutrition of dogs and cats</i> | IS016 |
| 09.30-09.45 | <u>Carla Giuditta Vecchiato</u> , Carlo Pinna, Alba Gaspardo, Monica Grandi, Costanza Delsante, Paola Parazza, Pietra Marco, Giacomo Biagi <i>Dietary supplementation with coconut oil in dogs with chronic enteropathies</i> | O155 |
| 09.45-10.00 | <u>Gerardo Siani</u> , Giada Morelli, Davide Stefanutti, Rebecca Ricci <i>Evaluation of body weight and body condition score in 64 European Shorthair adult cats</i> | O156 |
| 10.00-10.15 | <u>Giada Morelli</u> , Roberta Di Maggio, Rebecca Ricci <i>Copper-associated liver disease in a Bergamasco Sheepdog: a case report</i> | O157 |
| 10.15-10.30 | <u>Sara Albarella</u> , Emanuele D'Anza, Giacomo Galdiero, Alessandra Iannuzzi, Pietro Parma, Vincenzo Peretti, Francesca Ciotola <i>Disorders of sexual development in 9 dogs: clinical, cytogenetics and molecular findings</i> | O158 |

Friday, September 24th - Room Galileo
11:00 - 12:30

SESSION 33 - Animal efficiency - II

Chairs: Gerolamo Xiccato, Rodolfo Ballestrazzi

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| 11.00-11.15 | <u>Giulio Pillan</u> , Anton Pascual, Luca Carraro, Anna Concollato, Angela Trocino <i>Production and egg quality in brown hens kept in a cage-free system: effects of hen age and nest lighting</i> | O159 |
| 11.15-11.30 | <u>Roberto Cerri</u> , Fabio Mina, Rodolfo Ballestrazzi, Antonio Jesus Vizcaino Torres, Francesca Tulli <i>In vitro protein degradability in fish: a tool to evaluate novel protein sources</i> | O160 |
| 11.30-11.45 | <u>Alberto Stanislao Atzori</u> , Antonio Gallo <i>System dynamics applications in animal science and dairy farm management</i> | O161 |
| 11.45-12.00 | <u>Antonio Gallo</u> , Claudio Valsecchi, Elisabetta Manca, Francesco Masoero, Alberto Stanislao Atzori <i>A Survey on feeding economics in intensive dairy farms</i> | O162 |
| 12.00-12.15 | <u>Castro Ndong Ncogo Nchama</u> , Mario Baldini, Carla Fabro, Elena Saccà, Vinicius Foletto, Silvia Pianezze, Mirco Corazzin, Edi Piasentier <i>Performance of cull cows fed diets supplemented with hempseed cake</i> | O163 |

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| 12.15-12.30 | <u>Marica Simoni</u> , Claudia De Lorenzi, Marta Pozza, Daniele Giaccone, Andrea Revello Chion, Luciano Comino, Federico Righi <i>Bovine milk quality and apparent digestibility of diets as affected by diet characteristics and milking system</i> | O164 |
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Friday, September 24th - Room Giotto 11:00 - 12:30

SESSION 34 - Omics technologies - III

Chairs: Paolo Ajmone Marsan, Maria Silvia D'Andrea

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| 11.00-11.15 | <u>Giovanna Salvatore</u> , Valentino Palombo, Mario Vailati Riboni, Mariasilvia D'Andrea, Adam J. Geiger, Michael R. Akers, Juan J. Looor <i>Estrogen levels effect on mammary parenchyma explants from Holstein heifer calves fed an enhanced preweaning diet evaluated via RNA-sequencing</i> | O165 |
| 11.15-11.30 | <u>Isaac Hyeladi Malgwi</u> , Perta Grünvald, Ildikó Jócsák, Veronika Halas <i>Genes related to fat metabolism in pigs and intramuscular fat content of pork</i> | O166 |
| 11.30-11.45 | <u>Antonella della Malva</u> , Marzia Albenzio, Mariangela Caroprese, Maria Giovanna Ciliberti, Lucia Figliola, Antonella Santillo, Agostino Sevi, Rosaria Marino <i>Proteomics to investigate tenderness biomarkers in Martina Franca donkey meat</i> | O167 |
| 11.45-12.00 | <u>Alberto Palmonari</u> , Damiano Cavallini, Silvia Turrone, Francesca Ghiaccio, Giovanni Buonaiuto, Giorgia Canestrari, Ludovica Mammi <i>Impact of acidogenic diets on rumen microbial community</i> | O168 |
| 12.00-12.15 | <u>Bruno Stefanon</u> , Michela Cintio, Sandy Sgorlon, Alfonso Zecconi, Monica Colitti, Elisa Scarsella <i>MiRNAs cargo of milk exosomes are related to somatic cell count in dairy cows</i> | O169 |
| 12.15-12.30 | <u>Edo D' Agaro</u> , Andrea Favaro, Stefano Mattiussi <i>First assembled reference genome of white-clawed crayfish (<i>Austropotamobius pallipes italicus</i>)</i> | O170 |

Friday, September 24th - Room Petrarca 11:00 - 12:30

SESSION 35 - Genetic diversity

Chairs: Alfredo Pauciuolo, Stefano Capomaccio

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| 11.00-11.15 | <u>Alberto Cesarani</u> , Andre Garcia, Giacomo Bertolini, Daniela Lourenco, Nicolò Macciotta <i>Using runs of homozygosity within single-step genomic BLUP</i> | O171 |
| 11.15-11.30 | <u>Christos Dadousis</u> , Michela Ablondi, Jan-Thijs van Kaam, Alberto Sabbioni <i>Genomic inbreeding estimates with imputed genotypes in Italian Holstein dairy cattle</i> | O172 |

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| 11.30-11.45 | <u>Matteo Cortellari</u> , Alessio Negro, Arianna Bionda, Stefano Frattini, Silverio Grande, Paola Crepaldi <i>Inbreeding depression in small ruminants: from pedigree to genomic estimation</i> | O173 |
| 11.45-12.00 | Elisa Somenzi, Ettore Randi, Gwenola Tosser-Klop, Roberta Ciampolini, <u>Licia Colli</u> <i>SNP-based characterization of Montecristo feral goats in a Mediterranean perspective</i> | O174 |
| 12.00-12.15 | <u>Giuseppina Schiavo</u> , Samuele Bovo, Silvia Tinarelli, Manolo Cappelloni, Maurizio Gallo, Luca Fontanesi <i>A comparative analysis of pedigree- and genomic-derived inbreeding parameters in Italian heavy pig breeds over the last decades</i> | O175 |
| 12.15-12.30 | <u>Michela Ablondi</u> , Claudio Cipolat-Gotet, Christos Dadousis, Giorgia Stocco, Anna, Alberto Sabbioni <i>The impact of inbreeding in the Italian Holstein breed</i> | O176 |

Friday, September 24th - Room Palladio
11:00 - 12:30

SESSION 36 - Companion animals and society - II

Chairs: Luigi Liotta, Monica Cutrignelli

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| 11.00-11.15 | <u>Arianna Bionda</u> , Matteo Cortellari, Alessio Negro, Stefano Frattini, Andrea Talenti, Luigi Liotta, Paola Crepaldi <i>Genomic evaluation of the Italian shepherd dogs</i> | O177 |
| 11.15-11.30 | <u>Marco Isidori</u> , Fabrizio Rueca, Francesca Romana Massacci, Manuela Diaferia, Andrea Giontella, Marco Caldin, Tommaso Furlanello, Ronald J. Corbee, Gabriele Mannucci, Giovanni Pezzotti, Massimo Trabalza-Marinucci <i>Dietary <i>Ascophyllum nodosum</i> and <i>Bacillus subtilis</i> C-3102 influence faecal fermentation patterns in dogs with chronic enteropathies</i> | O178 |
| 11.30-11.45 | Alessandro Vastolo, Serena Calabrò, <u>Monica Isabella Cutrignelli</u> <i>Effect of different diets on metabolic profile of healthy adult dogs</i> | O179 |
| 11.45-12.00 | <u>Elisa Scarsella</u> , Aashish Jha, Bruno Stefanon <i>Network-based gut microbiome analysis in dogs</i> | O180 |
| 12.00-12.15 | <u>Eleonora Fusi</u> , Annalaura, Laura Rua, Raffaella Rossi <i>Renal petfood for dogs and cats: fatty acids profile</i> | O181 |