Scientific programme

Sunday 19 April

Session 1. Welcome Reception & Opening session

Room: Main auditorium
Chair: Johnson / Kreuzer
Session Type: Plenary session

Theatre Session 1

18:00 Welcome Remarks

18:30 Accomplishments and latent potential in joint and complementary research efforts to reduce emissions in livestock systems
invited *A. Bannink, S. Van Gastelen, H. J. Van Dooren, J. Dijkstra*

Monday 20 April

Session 2. Enteric methane - Supplementation (1)

Room: Main auditorium
Chair: Azevedo / Niu
Session Type: Theme session

Theatre Session 2

9:00 Potential of plants and algae rich in secondary compounds on the mitigation of ruminant methane emissions
invited *R. J. B. Bessa, A. L. Abdalla Filho*

9:45 One size doesn't fit all: Challenges and opportunities in methane mitigation across diverse livestock systems around the world
invited *C. Arndt*

10:30 Effects of supplementing beef cattle with oil macerate of Asparagopsis taxiformis on methane emissions, growth performance, meat quality and carbon footprint.
D. M. Soares, N. Rodrigues, A. Oliveira, H. Ramos, J. M. Almeida, S. P. Alves, S. P. Alves, G. M. Marques, G. M. Marques, J. Santos-Silva, R. J. Bessa, T. Domingos

10:45 Bromine mass balance calculation for dairy cows fed bromoform-based feed additives
R. Tognelli, P. Alvarez-Hess, R. Williams, R. Eckard, S. Denman, J. Jacobs

11:00 Coffe Break

11:30 Bromoform-based additive to reduce enteric methane in finishing Nellore cattle
T. Freitas, L. G. Oliveira, F. Santos, G. Mourão, G. Congio, A. Nardi, M. Bassani, M. Prado, L. H. Oliveira, G. Arnandes, P. Alvarez-Hess, A. Berndt, D. Costa

11:45 Effects of leafy Brassica species on methane production and in vitro rumen fermentation characteristics
A. V Chaves

12:00 Mitigating Enteric Methane Through Forage Diversification: Effects of Greenleaf and Silverleaf Desmodium on Methane Yield and Intake of Dorper Sheep
E. H. Cabezas-Garcia, V. Lind, L. Kiprotich, J. Gakige, C. S. Jones, C. Arndt

12:15 Reduction of enteric methane emissions in Belgian Blue bulls during the final growth stages by increasing fat supplementation
T. Van De Gucht, L. Vandaele, B. Ampe, F. De Craene, A. Van Malleghem, N. Peiren

12:30 In silico screening of food-derived compounds and in vitro rumen fermentation identifies Alliin as a potential methane inhibitor in dairy cows
R. Peng, Z. Song, G. Foggi, Z. Huang, M. Niu

Poster Session 2

02.11 Tannin Supplementation in cow-calf pairs grazing a grass monoculture
J. Villalba, H. Blanchard, X. Dai, N. Panciroli, O. Desrues, C. Cabral

02.12 Nutritional Assessment and Enteric Methane Mitigation Potential of the Invasive Alga Rugulopteryx okamurae
H. P. B. Nunes, C. S. Maduro-Dias, A. E. S. Borba

02.13 Evaluation of seaweed-based feed additive on enteric methane emissions of grazing heifers on pasture
J. Chen, T. Loiselle, M. Theurer

02.14 Effects of a bromoform-based feed additive on the fermentation profile and methane production in an in vitro batch culture system
G. Dubeux, A. Fernandez-Lehmann, A. Maderal, F. Tarnonsky, I. Fernandez-Marenchino, M. P. Gambaro, T. M. Schulmeister, L. Garcia, M. Ruiz-Moreno, P. Alvarez-Hess, R. Tognelli, S. Jacques, N. Dilorenzo

02.15 How long does it take to low levels of quebracho and chestnut tannin extract supplementation to grazing dairy cattle affect methane production?
A. Kraal, E. Wilson, M. Bedegain, R. Burgess, F. Pereira, S. Kumara, N. Panciroli

02.16 Hazel leaves: a means to reduce methane emissions and concomitantly improve the fatty acid profile of bovine milk?
M. Terranova, A. Birkinshaw, M. Kreuzer

02.17 Influence of plant secondary metabolite-producing forb inclusion on digestive capabilities and greenhouse gas emission potential of beef steers
C. Siziba, M. K. Mullenix, S. L. Dillard, J. P. Muir, W. B. Smith

02.18 Evaluating the methane mitigation potential of Canadian oilseed co-products using in vitro ruminal batch culture
M. S. Williams, T. Chambwe, S. A. Terry, G. O. Ribeiro

02.19 Evaluation of Rumen-Protected Lysine Supplementation on Performance and Greenhouse Gas Emissions in Nellore Beef Cattle Finished in Feedlot
M. S. Santos Marques, E. Furlan Junior, M. G. Dalafini, J. O. Julião Michelini, C. A. Franzon, E. Magnani, T. H. Silva, R. H. Branco

02.20 The impact of Essential Oils on the in vitro methane production and ruminal fermentation
O. Guerreiro, D. Salvaterra, A. P. Portugal, K. Paulos, J. Costa, A. T. Belo, E. Jerónimo

02.21 Evaluation of essential oils on in vitro ruminal fermentation, gas production kinetics, and enteric methane mitigation
M. Gerarduzzi Dalafini, E. Furlan Junior, M. Suzane Santos Marques, J. O. Julião Michelini, C. Almeida Franzon, E. Magnani, T. H. Da Silva, R. H. Branco

02.22 Dietary supplementation of Agolin Ruminant® reduced enteric methane emissions in dairy buffaloes monitored by sniffer method
C. Rossi, G. Grossi, C. Evangelista, F. Petrocchi Jasinski, L. Basiricò, A. M. Lippiello, E. Ferrara, U. Bernabucci, N. Lacetera, A. Vitali

02.23 Effect of garlic by-product supplementation on methane emissions in Merino lambs
C. Barraso, J. García-Gudiño, M. .. López-Parra, A. García

02.24 Effects of dimethyl sulfoxide dose on in vitro rumen fermentation and methane production
A. V. Chaves

02.25 Malate salts as modifiers of ruminal fermentation and reducers of methane emissions
T. De Evan, J. López-Paredes, M. Puyalto, J. J. Mallo, M. D. Carro

02.26 The synergistic effect of malate and monensin enhances rumen fermentation
J. López-Paredes, T. De Evan, M. Puyalto, J. J. Mallo, M. D. Carro

02.27 In vitro evaluation of natural additives on ruminal fermentation and methane emissions in finishing diets
E. Furlan Junior, C. A. Franzon, J. P. Ludwig, M. S. Santos Marques, M. G. Dalafini, E. Magnani, T. H. Silva, R. H. Branco

02.28 Inclusion of CaO2 in sheep diets to reduce methane emissions under Norwegian conditions.
S. Nyamuryekung'E, N. Tulâne, G. Jørgensen, V. O'flaherty, V. Lind

02.29 Methane emissions in gir dairy heifers fed diets containing different proportions of wheat silage
E. A. Silva, D. S. S. Lisboa, A. H. M. Arcanjo, B. G. C. H. Homem, L. S. Rezende, G. C. Alves, L. E. F. Zadra, L. L. S. Féres, F. O. Franco

Session 3. Animal Systems (1)

Room: Room 2
Chair: Boland / Kirwan / Johnson
Session Type: Theme session

Theatre Session 3

10:30 Mitigating ammonia and methane emissions in herbage-based dairy farming through tannin-rich diets: a multistage approach
G. Lazzari, A. Münger, L. Eggerschwiler, M. Zähner, M. Kreuzer, S. Schrade, F. Dohme-Meier

10:45 Application of precision technologies to assess the environmental impact of mountain grazing system
M. Pavolini, S. Sari, G. Gislon, S. Bonizzi, N. Palladini, L. Bava, M. Zucali, A. Tamburini, A. Sandrucci

11:00 Coffe Break

11:30 Excellence Farms as live labs for climate-smart skills in dairy goats: integrating digital milk-yield data into training pathways
I. Kaimakamis, L. Fotos, V. Papatsiros

11:45 The ammonia emission reducing potential of zeolite products when used as manure additive in cattle and goat barns
K. Goossens, T. Van De Gucht, N. Peiren, J. Vandicke

12:00 Grass-legume mixture enhances N use efficiency and stability of grazing systems
J. Dubeux, K. Trumpp, L. Garcia, K. Sganzerla, D. Jaramillo, E. Santos, L. Queiroz, I. Bretas, M. Ruiz-Moreno

12:15 Animal density, nitrogen balance, and nitrous oxide emissions in New York dairies
O. F. Godber, J. K. Lee, Q. M. Ketterings

12:30 Identification of key indicators determining environmental impacts in German milk production systems
J. Drews, J. Koerte, S. Krueger, P. Sanftleben

12:45 Environmental benefits of multicarbohydrase-phytase complex supplementation in broiler production: a life cycle assessment approach
T. De Rauglaudre, M. Jlali

13:00 Lunch

14:00 Lecture in Main Auditorium

14:45 Pastures redefined: Multispecies swards enhance the sustainability of a dairy-calf-to-beef system
T. Boland, H. Sheridan, A. Evans, P. N. Murphy, P. Crosson, O. Schmidt, F. Monahan, F. Horan, S. Baker, F. Godwin, D. Murphy, J. Ekanayake, A. Kelly

15:00 CERZOO as a supersite for circular livestock farming: integrating research, monitoring, and co-design for sustainable dairy systems
A. Fiorini, F. Ardenti, F. Froldi, P. Bani, E. Trevisi

15:15 Coffe Break

15:45 "Abattoir Air Quality: An Unknown Quantity." Volatile Organic Compound Characterisation in Beef Abattoirs.
E. Gannon, K. Farag, G. Charlton, J. Covington, L. Mcintyre

16:00 The impact of immunocastration on the carbon footprint of male fattening pigs
J. Gickel, C. Visscher

16:15 Meta-analysis of the effects of dietary inclusion of by-products containing polyphenols on milk production traits of goats.
A. Nudda, F. Correddu, M. F. Lunesu, S. Carta, A. Cesarani, M. Farina, G. Pulina

16:30 Subclinical Mastitis in Kenyan Herds: Milk Loss, Emission Intensity, and Food Security Risks
E. Gurmu, M. Bronsvoort, E. Cook, P. Ruegg, P. Rosensteil, N. Wheelhouse, L. González-Gordon, S. Ozkan, J. Gibbons, J. Hawkins, C. Arndt

16:45 Simulating dietary protein and methane-mitigation strategies with the Ruminant Farm Systems (RuFaS) model
V. Cabrera, K. Reed, Y. Gong

Poster Session 3

03.20 Native Warm Season Perennials as Climate Resilient Forage options for Semi-Arid Beef Systems in South Texas
G. Schuster, A. D. Falk, J. L. Foster, N. L. Mast

03.21 Efficiency of the Limousine cattle breed in Portugal based on technological and natural solutions
J. Carvalho, F. Veríssimo, C. Almeida, M. Martins, J. Carneiro

03.22 Attributing upstream cattle emissions to Italian bovine leather: allocation choices and implications for the national tanning carbon footprint
F. Correddu, M. F. Lunesu, A. Nudda, G. Battacone, G. Pulina

03.23 Effect of cricket frass as an organic fertilizer on forage quality
I. Rehan, C. Queda, H. Ribeiro, J. Gramacho, O. Moreira, G. Costa, R. Menino

03.24 The effects of by-pass lysolecithin supplementation on milk quality parameters: sheep as a case study
J. López-Paredes, J. Conde, G. Giner, A. Del Real, L. Pandolfini, M. Puyalto, J. J. Mallo

03.25 Isotopic characterisation of commercial pig feeds
R. P. Braga Terra, C. S. Linhares Cipriano, M. Anton Dib Saleh

03.26 Global analysis of nutritional strategies to mitigate the environmental impacts of dairy production: the case of supplementing diets with microencapsulated B vitamins
P. Agyemang, E. M. Kofie, L. Lahaye, M. Otis, E. Fontaine, V. Assesltine, A. Payne, G. Thoma, L. Dufour

03.27 Reducing environmental footprints in low-input livestock systems through the integration of root and tuber by-products into smallholder diets
A. C. Nwokoro, E. C. Mba, H. C. Nwokoro, I. Olaleru

03.28 Liquid and powdered bacteriocin-rich γ-PGA feed additives in goose fattening: productive implications
P. Micek, M. Lis, M. Trela, K. Gondek, K. Kustra

03.29 Environmental and production aspects of the use of dried berry pomace in the feeding of fattening pigs.
D. Łodyga, A. Zaworska-Zakrzewska, A. Cieślak

03.30 Impact of fat source and lysolecithin supplementation on energy and nutrient utilization in pigs
G. Yordanova, R. Nedeva, M. Petrova, K. Eneva, S. Icely, S. C Mansbridge, S. P Rose, V. Pirgozliev

03.31 Lactation Curve of Sindi Cows (Bos taurus indicus) in a Tropical Environment of the Brazilian Cerrado
I. C. Ferreira, J. C. De Melo, A. Q. De Mesquita, C. F. Martins

03.32 Residual feed intake as a tool for efficiency in beef production systems in tropical regions
S. Bonilha, J. Muñoz, R. Canesin, J. Cyrillo, M. E. Mercadante, R. Branco

03.33 Associations Between Expected Progeny Differences and Measured Feed Efficiency in Post-Weaned Red Angus Calves
N. Mast

03.34 Milk production and composition of Sindi cows under grazing conditions in the Cerrado biome
J. C. Melo, I. C. Ferreira, A. Q. Mesquita, C. F. Martins

03.35 Growth Potential of ½ Sindi × ½ Montbéliarde Animals Using the Gompertz Growth Curve
J. C. Melo, C. F. Martins, A. Q. Mesquita, I. C. Ferreira

03.36 Effect of Lactation Stage on Energy-Corrected Milk (ECM) Yield in Sindi Cows
I. C. Ferreira, J. C. De Melo, A. Q. De Mesquita, C. F. Martins

03.37 Cattle health and sustainability: The impact of bovine respiratory disease on the performance and carbon footprint of cattle – A systematic literature review and meta-analysis
L. Esslage, C. Visscher, J. Gickel

03.38 Mild Protein Restriction During Mid-Gestation Does Not Affect Placental Health or Calf Birth Outcomes in Extended-Grazed Beef Cows
G. Diddeniyage, H. E. Yang, J. Hernandez-Medrano, N. Malmuthuge

03.39 Factors Affecting the Recurrence of Diarrhea in Purebred Sindi and ½ Sindi ½ Montbéliard Calves
F. L. Rodrigues, C. F. Martins, J. C. Melo, A. Q. Mesquita, I. C. Ferreira

03.40 Incidence of Diarrhea in Purebred Sindi and ½ Sindi ½ Montbéliard Calves
F. L. Rodrigues, J. C. Melo, S. A.s.oliveira, A. Q. Mesquita, C. F. Martins, I. C. Ferreira

03.41 Qualitative classification of reactivity in Gyr and Guzerat heifers during pre-milking training
P. Silva Arcanjo, S. Oliveira, J. Melo, L. Santos Féres, A. Arcanjo, I. Ferreira

03.42 Reactivity of Gyr and Guzerat heifers during different phases of rational taming
P. Silva Arcanjo, S. Oliveira, J. Melo, L. Santos Féres, I. Ferreira

03.43 Apparent digestibility of diets with different inclusion levels of wheat silage for Holstein × Gyr cows
A. Arcanjo, L. Jacob, E. Silva, M. Camilo, L. Santos Féres, L. Silva, Y. Silva, R. Teixeira, M. Coelho

Session 4. Enteric & manure methane

Room: Main auditorium
Chair: Foggi / Chaves
Session Type: Theme session

Theatre Session 4

14:00 Advancing Bioactive Compounds into Antimethanogenic Feed Additives: Framework for Discovery, Evaluation and Selection
invited *Z. Durmic*

14:45 Dietary fibre and protein content influence formation of methane in the hindgut and in manure of pigs
A. Jansman, E. Royer, P. Bikker

15:00 Full-scale implementation of a chemical additive, GasAbate, for reduction of GHG emissions from animal manures
D. Hughes, C. Thorn, R. Friel, V. O'Flaherty

15:15 Process based models for calculating methane emission from stored liquid manure
F. R. Dalby, S. G. Sommer

Poster Session 4

04.05 Enteric methane emission from grower-finishing pigs fed organic protein-rich feed ingredients
M. E. Van Der Heide, X. Y. Zhu, J. V. Nørgaard, E. Sattarova

04.06 Enteric methane emission from organic growing-finishing pigs fed ingredients rich in insoluble fiber
E. Sattarova, X. Y. Zhu, J. V. Nørgaard, M. E. Van Der Heide

04.07 Equation for daily methane emissions of fattening pig unit depending on excretions and temperature
S. Espagnol, N. Guingand, C. Tirlemont

04.08 Development of a slurry additive for pig manure, to reduce GHG emissions, retain nutrient value and influence animal health
D. Hughes, C. Thorn, R. Friel, V. O'Flaherty

04.09 Influence of Cultivation Intensity on the Net Carbon Footprint of a Mediterranean Cow–Calf System
M. F. Lunesu, M. F. Caratzu, S. Sechi, G. Pulina, G. Battacone, A. Nudda

Session 5. Enteric methane - Supplementation (2)

Room: Main auditorium
Chair: Foggi / Chaves
Session Type: Theme session

Theatre Session 5

16:00 Mitigation of enteric methane emissions in Italian Holstein heifers through nutritional strategies
W. Chen, G. Meli, P. Grisenti, L. Benzoni, R. Finocchiaro, M. Cassandro, V. Bontempo, G. Savoini, G. Invernizzi

16:15 Producer Adoption and Economic Pathways for Reducing Enteric Methane in U.S. Feedlot Cattle Using 3-Nitrooxypropanol (3-NOP)
J. Luke, G. Tonsor

16:30 Combined effects of hydrogen sink compounds and dietary NDF level on enteric methane emission measured using SF_6 tracer in a dual-flow continuous culture system
G. Balieiro Neto, M. Jorge, A. Berndt, C. E. K. M. C. Jordao

Session 6. Enteric methane - Grazing (1)

Room: Main auditorium
Chair: Foggi / Chaves
Session Type: Theme session

Theatre Session 6

16:45 The Efficacy of Greenhouse Gas Mitigation Practices in Pasture-Based Livestock Systems: A Meta-Analysis
M. Osewe, D. O'Brien, M. Markiewicz-Keszycka

17:00 Enteric methane emissions of beef heifers grazing naturalized pastures in Western Canada under high and low stocking rates

W. Hao, A. Macias Franco, A. E. Moreira Da Silva, M. Londono-Mendez, S. Lasso Ramirez, V. Ramirez Sepulveda, V. Mah, G. Nickols, C. Fitzsimmons, E. R. Da Silva Santos, K. Wood, G. O. Ribeiro, S. Terry, G. Medeiros Da Silva

17:15 Restricted grazing reduces enteric methane emission of high-yielding dairy cows
M. Cromheeke, L. Vandaele, T. Van De Gucht, J. Van Mullem, L. Koning, D. Van Wesemael, N. Peiren

17:30 Seasonal and Diurnal Variation on Enteric Methane Emissions of Beef Cattle Grazing Rangelands
J. Ranches, J. Torres, A. Cristine Rezende Dos Santos, E. Ferri De Oliveira, D. Bohnert, R. O'Connor

Poster Session 6

06.05 Enteric methane emissions and animal performance in mixed pastures with forage legumes
G. C. Alves, L. S. Rezende, L. F. Souza, W. S. Souza, C. P. Rezende, R. M. Boddey, B. G. C. Homem, D. R. Casagrande

06.06 Impacts of cow–calf system intensification on performance and enteric methane emissions in beef cattle
L. S. Rezende, G. C. Alves, E. H. R. Domingues, W. S. Souza, M. P. Gionbelli, T. F. Bernardes, R. M. Boddey, B. G. C. Homem, D. R. Casagrande

06.07 Effect of forage cultivar selection on digestive capabilities and greenhouse gas emission potential of beef cattle
A. R. Hines, M. K. Mullenix, S. L. Dillard, T. R. Callaway, W. B. Smith

06.08 Methane emissions in Verata goats under extensive grazing in dehesa system: preliminary results
J. García-Gudiño, C. Barraso, A. García, P. L. Rodríguez-Medina, M. M. López-Parra

06.09 Rice bran supplementation on heifers grazing native pasture: Ruminal environment and methane emissions
C. Ferrés-Castells, G. Fernandez-Turren

Tuesday 21 April

Session 7. Nitrogen in Animal Systems

Room: Main auditorium
Chair: Wagner Riddle / Olivo
Session Type: Theme session

Theatre Session 7

9:00 Lessons learned about on-farm N emissions from ruminant systems and strategies for mitigation
invited *A. Leytem*

9:45 Nitrogen efficiency in animal farming systems with specific emphasis on pigs and poultry (invited talk)
invited *J. Y. Dourmad, B. Méda*

10:30 Assessing Environmental Impacts of Using Plasma Technology for Manure Treatment: A Whole-Farm Dairy System Analysis
S. H. Pishgar-Komleh, T. Vellinga

10:45 Comparative evaluation of four carbon assessment tools for dairy production systems
F. Nadon, J. P. Matteau, S. Binggeli, É. Charbonneau

11:00 Validation of a New Multi-Compartment Dairy Research Barn for Controlled Gas Emission Measurements
S. Dicks, J. Paßmann, D. Nett, M. Trimborn, W. Büscher

11:15 Coffe Break

11:45 Novel Dairy Research Barn: Precision Emission Measurements and Animal–Environment Interaction Analysis
J. Paßmann, S. Dicks, D. Nett, M. Trimborn, W. Büscher

12:00 Equation for daily ammonia emissions of fattening pig unit depending on excretions and temperature
C. Tirlemont, N. Guingand, S. Espagnol

12:15 Development of NH3 emission factors for pig housing systems from a comprehensive literature analysis
N. Guingand

12:30 Ammonia Reduction in Laying hens via Alfalfa-Based Organic Diets
A. Dreßel, A. I. Kirn, P. Hofmann, P. Weindl, S. Thurner, D. Andrade, J. Steinhoff-Wagner

12:45 By-product based diets may enhance methane formation in pig manure whereas ammonia emission can be controlled by dietary strategies
P. Bikker, P. Mostert, A. Jansman

13:00 A Statistical–Machine Learning approach for Assessing Methane Emissions in Pig Production Systems based on Physiological, Nutritional and Fecal Composition parameters
N. C. Deb, F. Carlos, S. Calvet, P. García-Rebollar, O. Piquer, A. Cerisuelo

Poster Session 7

07.13 Impacts of Straw Characteristics and Manure Management on Ammonia and Methane Emissions in Straw-Bedded Pig Housing
J. Falke, F. Eckmüller, L. Kabo, F. Betzenbichler, D. Andrade

07.14 Development of a decision tool to evaluate NH3 concentrations in pig houses
N. Guingand

07.15 Continuous Monitoring Reveals Substantially Lower Ammonia Emissions in Fattening Pig Units with 40% Convex Solid Floors compared to Full Slatted Floors
S. Debevere, S. Ingelbeen

07.16 Potential environmental and production benefits of integrating farm-grown lupin and faba bean seeds into closed-loop feeding systems for native pig breeds
D. Łodyga, M. Kasprowicz-Potocka

07.17 New indicators for whole-farm sustainability: linking milk, land use, nitrogen surplus, and nitrous oxide emissions on New York dairy farms
O. F. Godber, J. K. Lee, Q. M. Ketterings

07.18 Re-feed: renewable energy production at farm level for energy efficiency and defossilization
R. Fragoso, M. Nogueira, J. Bastos, P. Brito, J. Silva Costa, I. Rehan, O. Moreia, E. Duarte

07.19 Ammonia emission rates from fattening pig housings with outdoor yard in Germany
B. Eurich-Menden, U. Wolf, G. Dehler, D. Horlacher, A. Smirnov, E. Grimm, K. Wagner, N. Kemper, S. Wulf

07.20 Manure Management Network - Research priorities for manure management in a changing world
S. Sommer, D. Pelster, S. Leitner, W. Ntinyari, W. Ibrahim, T. Van Der Weerden

07.21 Assessing measurement strategies to characterise barn emission behaviour with external emission sources
D. Nett, M. Trimborn, P. Ebertz, J. Paßmann, W. Büscher

07.22 Effects of a modified building and proactive ventilation on animal welfare in a conventional broiler barn
S. Schäfers, N. Kemper

07.23 Does Intensification Improve Environmental Efficiency in Pasture-Based Dairy Systems? A Three-Year Footprint Analysis
C. Loza, L. Gil, J. Gere, P. Chilibroste, M. P. Tieri

07.24 Does Collecting Greenhouse Gas Emission Data in Small Cattle Populations and Native Breeds Make Sense?
K. Żukowski, M. Skarwecka, D. Słomian, I. Radkowska

07.25 Application of a CO_2 emission calculator to assess the impact of forage crop production and grassland management on emissions in livestock farms
I. Radkowska, B. Kulik, A. Radkowski, M. Maziarka

07.26 Possibilities of using remote sensing in the context of CO_2 emissions reduction and sustainable grassland management on ruminant farms
I. Radkowska, A. Radkowski, W. Drzewiecki

07.27 A Regional-Local Approach for Assessing Seasonal Heat Stress in Livestock Farming
V. Papatsiros, G. Tsegas, E. Chourdakis, T. Trachalaki, C. Vlachocostas

07.28 Relationship between climate and mycotoxin contamination in different corn matrices
P. Premarajan, E. Pacifico, T. Fearn, E. Grandi, M. Ottoboni, F. Cheli, L. Pinotti

Session 8. Enteric methane - Grazing (2)

Room: Room 2
Chair: Terranova / Kreuzer
Session Type: Theme session

Theatre Session 8

10:30 Associations between nutrient composition and enteric methane yield in grazing and zero-grazing dairy systems
L. Koning, A. Bannink, S. Van Gastelen, G. Holshof, A. Klop, J. Dijkstra

10:45 The effect of sward type on lamb methane production and age at slaughter
R. Rooney, S. Woodmartin, T. Boland, N. Mchugh, P. Creighton

11:00 Mitigating Methane Emissions Without Impairing Production Performance: Grazing Strategies for Suckler Beef Cows?
R. Yi, Y. Yang, F. Lively, T. Yan, O. Cristobal-Carballo, K. Theodoridou

Session 9. Enteric methane - Non-dietary Measures

Room: Room 2
Chair: Terranova / Kreuzer
Session Type: Theme session

Theatre Session 9

11:45 Options and strategies for stacking methane-mitigating interventions to enhance enteric methane reduction in ruminant livestock
Z. Durmic, M. T. Harrison, R. Eckard, J. Jacobs, J. Kay, F. Cowley, B. Hayes

12:00 Breed differences in enteric emissions of Angus and Hays Converter beef heifers grazing naturalized pastures in Western Canada
W. Hao, A. Macias Franco, A. E. Moreira Da Silva, S. Lasso Ramirez, M. C. Londono Mendez, V. Ramirez Sepulveda, V. Mah, G. Nickols, K. Wood, E. Santos, G. Medeiros Da Silva

12:15 What the Azorean Catrina Can Teach Us in Contrast to the Holstein-Friesian
A. R. Azevedo, A. Da Câmara Machado, R. Franco-Duarte, J. Fagundes, A. Borba, D. Mendonça, M. S. Lopes

12:30 Methane emissions as affected by animal traits and productivity in dairy sheep: a GreenFeed® study on lactating ewes
E. Senatore, T. Malizzi, A. Silvi, F. Mannelli, G. Foggi, F. Scicutella, A. Medeiros, A. Buccioni, A. Mantino, S. Grande, A. Negro, M. Mele

12:45 Vaccination reduced Enteric Methane, without adverse effect on performance and nutrient digestibility of Beef Cattle
M. Muntari, B. Arciero, Z. Seekford, T. Minela, M. Ledwaba, G. E. Carstens, K. G. Pohler, C. G. Lamb

Poster Session 9

09.06 Bivariate analyses increase genomic prediction accuracy for enteric methane emission in Nelore cattle
T. L. D. S. Soares, O. Gonzalez-Recio, L. F. M. Mota, M. E. Z. Mercadante

09.07 Which Cow Breathes Cleaner? Comparing Methane emissions from the Catrina and the Holstein-Friesian
A. R. Azevedo, A. Da Câmara Machado, R. Franco-Duarte, J. Fagundes, A. Borba, D. Mendonça, M. S. Lopes

09.08 Effect of early weaning and feed additive supplementation on enteric methane emissions in new born dairy beef calves
A. Ayoob Khan, L. Cardenas, D. Enriquez Hidalgo, M. J. Rivero

09.09 Breeding for Lower Emissions: Exploring Enteric Methane, Residual Feed Intake, and Parasite Resistance in Lleyn Sheep
S. Morgan, N. Naylor, R. Wilkinson

09.10 Carry-over vs acute heat stress effects on the behavior of dairy cows exposed to a GreenFeed system to measure enteric gas emissions
I. Toledo, D. Onan-Martinez, M. De Bari, H. Olmo, J. Lance, G. Dahl

09.11 Methane Emissions and Productive Performance of Dairy Cows in Organic and Conventional Systems
A. Garcia-Rodriguez, R. Ruiz, H. Benhissi, A. Varsaki, C. Orlandini-Mendoza, O. Gonzalez-Recio, M. Martinez-Alvaro, J. A. Jimenez-Montero, I. Goiri

Session 10. Animal Systems (2)

Room: Main auditorium
Chair: Leytem / Jackson
Session Type: Theme session

Theatre Session 10

14:15 Whole-Farm Approaches to Advance Climate-Smart Livestock Systems
invited C. Wagner-Riddle, A. Olivo

15:00 Mapping Pathways to Reduce Greenhouse Gas Emissions in Canadian Dairies by 2030 and 2050
J. Minigan, S. Binggeli, S. Jayasundara, B. Mcconkey, D. Burton, E. Charbonneau, A. Vanderzaag, C. Wagner-Riddle

15:15 LIFE Green Sheep project: Mitigation strategies reduce carbon footprint of European sheep production
S. Throude, H. Chanel, M. Acciaro, O. Del Hierro, R. Ruiz, T. W. J. Keady, C. Buckley, L. Bragina, C. Dragomir

15:30 Systems level and nationally aggregated climate smart development pathways in Kenya's beef sector
J. Hawkins, R. Emiru, C. Stull-Lane, M. Staines, J. Creemers, C. Jones, S. Leitner, C. Arndt

15:45 Carbon balance of beef production: LCA-based estimation of emissions and carbon sequestration in silvopastoral systems
M. Finocchi, S. Sari, G. Zucca, F. Cella, A. Mantino, L. Bava, M. Zucali, A. Sandrucci, M. Mele

16:00 Coffe Break

16:30 Estimate carbon balance and financial viability for crop-livestock mixed farming and agrosilvopastoral systems: insights from the DIGITAF project
A. Ripamonti, M. Finocchi, E. Senatore, F. Cella, T. Malizzi, I. Lusini, L. Tramacere, M. Mele, A. Mantino

16:45 Implications of livestock FAO 2050 emissions projections on temperature change and carbon dioxide removal using GWP and GWP* metrics
F. Correddu, M. F. Lunesu, S. Sechi, M. F. Caratzu, G. Pulina

17:00 Engaging farmers in the climate change debate using a Citizens' Jury approach
A. Jackson

17:15 Motivations, constraints and incentives for adoption of climate-smart innovations: Evidence from UK dairy farmers
Y. Gadanakis, D. Enriquez-Hidalgo, Z. Baker, C. Reynolds, A. Mertens

17:30 Closing lecture
invited A. Bannink

18:00 Podium discussion

Session 11. Enteric methane - Measurement methods

Room: Room 2
Chair: Terranova / Kreuzer
Session Type: Theme session

Theatre Session 11

15:00 Integration of 3D camera–based postural analysis for early lameness detection and methane intensity mitigation in dairy cows
A. D. Garcia Lamothe

15:15 Linear and nonlinear relationship between global positioning system collars and enteric emissions for beef heifers grazing naturalized pastures
W. Hao, A. Macias Franco, A. E. Moreira Da Silva, S. Lasso Ramirez, M. C. Londono Mendez, V. Ramirez Sepulveda, V. Mah, G. Nickols, K. Wood, E. R. Santos, G. Medeiros Da Silva

15:30 Methodological assessment of the Gas Endeavour device for real-time measurement of CO_2 and CH_4 emissions from sheep diets
R. Gannuscio, G. Maniaci, M. Todaro

15:45 Coffe Break

16:15 Evaluation of Laser-based spot measurements using ventilated hoods chambers for direct enteric methane emissions
G. Foggi, L. Lanzoni, R. Boré, E. Senatore, G. Altana, M. Azzena, A. Franca, E. Vagnoni, A. Ledda, F. Correddu, S. Throude, M. Mele, A. S. Atzori

16:30 Evaluating the Accuracy of ZELP Sense™ Against Respiration Chambers for Methane Emission Measurement in Cattle
S. Silvestri, S. Muetzel, R. Bica

16:45 Comparison of procedures for estimating enteric methane emissions in dairy herds
M. Berton, M. A. Ramirez Mauricio, A. Cecchinato, H. Toledo Alvarado, M. Nocetti, L. Gallo, E. Sturaro

Poster Session 11

11.08 Effect of feed additives on in vitro gas production kinetics
M. G. Camilo, S. A. S. Oliveira, L. C. V. Ítavo, L. L. Santos Féres, A. H. M. Arcanjo, E. A. Silva

11.09 Evaluation of the Kleiber index in dairy Gyr heifers fed diets with different associations of wheat silage
M. G. Camilo, D. S. S. Lisboa, E. A. Silva, A. H. M. Arcanjo, B. G. C. Homem, L. S. Rezende, G. C. Alves, L. E. F. Zadra