

# **Conference program**

## *Tagungsprogramm*

**Society of Nutrition Physiology**  
*Gesellschaft für Ernährungsphysiologie*

**78<sup>th</sup> Conference 05<sup>th</sup>–07<sup>th</sup> March 2024 in Göttingen**  
*78. Tagung vom 05.–07. März 2024 in Göttingen*

# Lecture hall 008

Tuesday,

13:00	Opening and Welcome Prof. Dr. Jörg Aschenbach, 1st Chairman of the Society of Nutrition Physiology e. V. Prof. Dr. Bernhard Brümmer, Vice-President for Research and Sustainability at the Georg-August University of Göttingen (requested)
<b>Digestion and absorption</b>	
13:15	1 The effects of heat treatment on the nutrient digestibility of fish meal in rainbow trouts *Sessegolo Ferzola P.H., Ringel J., Schulz C., Gierus M. – Vienna / Trostberg / Kiel / Buesum
13:30	2 Do ruminants digesting more fibre on a given diet produce less methane per unit of digested fibre? *Claus M., Kreuzer M., Li Y., Schwarm A., Terranova M. – Zurich / As
13:45	3 Determination of the digestibility of phosphorus from <i>Hermetia illucens</i> larvae meal in pigs *Grundmann S.M., Herrero-Encinas J., Eder K. – Giessen / Madrid
14:00	4 n-Alkanes as predictive markers to assess the nutritional contribution of free-range systems for laying hens *Dardabou L., Schmidt M.W., Martínez J.C., Dublec K., Schwarz C., Ibañez M.A., Gierus M. – Vienna / Madrid / Keszthely
14:15	5 Effects of myo-inositol supplementation in the diet on myo-inositol concentrations in the intestine, blood, eggs, and excreta of high-performing laying hens *Sommerfeld V., Huber K., Rodehutschord M. – Stuttgart
14:30	6 Effects of feeding diets without mineral P supplement on intestinal concentrations and excretion of Ca and P in two high-performing laying hen strains *Sommerfeld V., Huber K., Rodehutschord M. – Stuttgart
14:35	7 Influence of luminal hexoses on L-alanine uptake in jejunum of broiler chickens *Riedel J., Schermuly I.I., Saliu E.-M., Zentek J., Aschenbach J.R. – Berlin
14:40	8 Studies on causative factors and consequences of delayed abomasal emptying in calves with diarrhea caused by <i>Cryptosporidium parvum</i> *Bachmann L., Berns K.C.E., Dengler F., Helm C., Ulrich R., Delling C., Hammon H.M., Liermann W. – Neubrandenburg / Dummerstorf / Vienna / Leipzig
14:45	9 Apparent digestibility of crude nutrients and minerals in C57Bl/6J and CD1 mice fed a standard diet *Böswald L.F., Matzek D., Popper B., Kienzle E. – Planegg-Martinsried / Oberschleißheim
14:50	10 Functional analysis of cinnamic acid and caffeic acid effects on gastric claudins *Vollstädt M.-L., Stein L., Amasheh S. – Berlin
14:55	Coffee and Conversation break
<b>Fatty acids and lipids</b>	
15:45	11 Effect of fat from <i>Hermetia illucens</i> in comparison to palm oil and soybean oil on the cecal gut microbiome, the plasma metabolome and the hepatic lipid metabolism in obese Zucker rats *Ringseis R., Marschall M.J., Grundmann S.M., Seel W., Simon M.-C., Schuchardt S., Most E., Gessner D.K., Wen G., Eder K. – Giessen / Bonn / Hanover
16:00	12 Effect of time point of sampling on fatty acid composition of hair from early lactating Holstein dairy cows *Wulf R., Meyer U., Dänicke S., Dannenberger D., Brockmann G. – Neubrandenburg / Berlin / Braunschweig / Dummerstorf
16:15	13 Effects of abomasal fatty acid supplementation on the adherent intestinal microbiota in lactating cows *Liermann W., Vogel L., Gnott M., Reyer H., Dannenberger D., Tröscher A., Hammon H.M. – Dummerstorf / Lampertheim
16:20	Session change
<b>Undesirable substances and antinutrients</b>	
16:25	14 Feeding behaviour of sheep grazing on pastures with a high density of tansy ragwort – results of a two-year study on ingested pyrrolizidine alkaloid doses, and the transfer of pyrrolizidine alkaloids into muscle meat and liver tissue *Aboling S., Ohlsen S., Huckauf A., Tänzer J., These A., Lenzewski N., Hass M.L., Ganter M. – Hanover / Molfsee / Berlin / Hamburg
16:40	15 Study on the transfer of per- and polyfluoroalkyl substances (PFAS) from contaminated hay into goat milk *Just H., Bode L., Wagner B., Meier J., Kersten S., Fischer-Tenhagen C., Kettler S., Crispin C., Jahnke A., Kürbis C., Lueth A., Pieper R., Dänicke S., Numata J., Mönning J.-L., Kowalczyk J. – Berlin / Braunschweig
16:55	16 Effects of per- and polyfluoroalkyl substances (PFAS) on the health of dairy goats *Bode L., Just H., Kowalczyk J., Pieper R., Zeyner A., Dänicke S., Kersten S. – Braunschweig / Berlin / Halle (Saale)

March 5, 2024

# Lecture hall 009

13:00	See Lecture hall 008
<b>Feedstuff evaluation and feeding</b>	
13:15	18 Influence of drying temperature and sodium hydroxide addition on amino acid digestibility of an alfalfa protein extract in caecectomised laying hens *Sieger W., Ibrahim A., Novotny M., Maziarka P., Rudolph Y., Kruse A., Kohlus R., Rodehutschord M. – Stuttgart
13:30	19 Gas production in a modified Hohenheim gas test obtained with preserved and fresh wether faeces as inoculum *Rippstein L., Titze N., Wild K., Seifert J., Rodehutschord M. – Stuttgart
13:45	20 <i>In vitro</i> evaluation of bacterial community dynamics during pig colonic fermentation using the modified Hohenheim Gas Test *Schmegel I., Berghaus D., Suhr M., *Homburg S.C. – Kiel / Pinneberg
14:00	21 Bacterial community composition and fermentation pattern in mixed silages prepared from drought-impaired grass *Gruber T., Fliegerová K., Terler G., Zebeli Q., Hartinger T. – Vienna / Prague / Irdning-Donnersbachtal
14:15	22 Effect of tannins on <i>in vitro</i> digestibility and total gas production of tropical browse plants *Roessler R., Schlecht E. – Witzenhausen / Göttingen
14:30	23 Effect of incorporating <i>Mitragyna inermis</i> (Willd.) Kuntze leaves into granulated concentrates on feed intake and growth performance of mixed-breed (Sahelian x Djallonke) sheep in Benin (West Africa) *Alowanou G.G., Akouédégní G.C., Koura I.B., Dossou S., Zinsou F., Kifouly H.A., Challaton P., Hounzangbé-Adoté S. – Abomey / Abomey-Calavi / Kétou
14:45	24 Alteration of nutrient fractions in grains and legume seeds from harvest to 14-weeks of storage *Kuenz S., Riepl F., Liegsalz T.M., Steinhoff-Wagner J., Windisch W. – Freising
14:50	25 Particle size distribution of cobs – how much physical structure is still present? *Krone B., Hummel J. – Göttingen
14:55	26 Effects of variety and cultivation year of sorghum on nutrient value and <i>in vitro</i> fermentation characteristics Osman A., *Abd El-Wahab A., Ahmed M., Buschmann M., Lingens J.B., Visscher C., Hartung C.B. – Hanover / Einbeck
15:00	27 Spectrophotometric investigation of the co-incubation of <i>Streptomyces griseus</i> protease and carbohydrase on the release of reducing sugars *Okon P., Liebscher S., Simon A.H., Wensch-Dorendorf M., Bachmann M., Bordusa F., Zeyner A. – Halle (Saale)
15:05	Coffee and Conversation break
<b>Feed additives</b>	
15:45	28 Influence of UVB exposure and dietary Vitamin D supplementation on Vitamin D metabolism and Ca homeostasis in growing rabbits Boemgen H., Brugger D., *Liesegang A. – Zurich
16:00	29 Influence of live yeast ( <i>Saccharomyces cerevisiae</i> ) on feed intake and growth performance of German Fleckvieh and crossbred (Brown Swiss x Belgian Blue) bulls *Ettle T., Obermaier A., Schneider N. – Grub / Munich
16:15	30 Influence of a biotechnologically produced <i>Pleurotus sapidus</i> -mycelium on the gut microbiome and the hepatic lipid metabolism of broilers *Schäfer L., Grundmann S. M., Rühl M., Seel W., Simon M.-C., Most E., Ringseis R., Eder K. – Giessen / Bonn
16:30	31 Effects of a biotechnologically produced <i>Pleurotus sapidus</i> -mycelium on breast muscle expression of genes involved in protein synthesis and protein degradation in broilers *Schäfer L., Herrero-Encinas J., Rühl M., Most E., Eder K., Ringseis R. – Giessen / Madrid
16:35	32 Insights on immunomodulatory effects of probiotic <i>Bacillus subtilis</i> and <i>B. velezensis</i> on chicken PBMCs. Larsberg F., Sprechert M., Hesse D., Loh G., Brockmann G., *Kreuzer-Redmer S. – Vienna / Berlin / Halle (Westfalen)
16:40	33 Impact of a probiotic strain of <i>Saccharomyces cerevisiae</i> vs. inactivated brewer's yeast added to a high starch diet on microbial fermentation products <i>in vitro</i> (Cositec) Hambuch C., Pisch C., Bachmann M., Richardt W., *Zeyner A. – Halle (Saale) / Lichtenwalde
16:45	34 Antioxidant and immunomodulatory effects of willow leaves ( <i>Salix spp.</i> ) as a supplement in cattle nutrition *Müller C.B., Görs S., Mittermeier-Kleßinger V., Kuhla B. – Dummerstorf / Freising

# Lecture hall 008

Tuesday,

Undesirable substances and antinutrients	
17:00	17 Optimization of deoxynivalenol inactivation in maize using sodium metabisulfite by hydrothermal processing *Noldin A., Sudwischer P., Saltzmann J., Hollenbach E., Visscher C., Dänicke S., Kersten S. – Braunschweig / Ludwigshafen / Hanover
17:05	Poster discussion – Digestion and absorption / Fatty acids and lipids / Undesirable substances and antinutrients
17:45	END Technical Programme Day 1
18:00	Henneberg/Lehmann Foundation Awards Ceremony (seperate registration required)
20:00	END Day 1

# Lecture hall 008

Wednesday,

09:00	Review lecture Public opinion about animal nutrition: Designing the dynamic interface between science and society Klimmt C. – Hanover University of Music, Drama and Media, Department of Journalism and Communication Research (IJK), Hanover, Lower Saxony, Germany
10:00	Coffee and Conversation break
Amino acids and nitrogen	
10:30	37 Effect of protein content in isoenergetic diets on energy, nitrogen, and amino acid retention of the Black Soldier Fly Larvae (BSFL; <i>Hermetia illucens</i> L.) *Schneider L., Schuh-von Graevenitz K., Wiltfsky-Martin M., Dusel G. – Bingen am Rhein / Hanau
10:45	38 Dried industrial hemp leaves as a possible alternative protein source in dairy cow nutrition *Schwerdtfeger J., Kuhla B. – Dummerstorf
11:00	39 Kidney function and nitrogen excretion in Brown Swiss and Holstein dairy cows *Kessler E.C., Bruckmaier R.M., Gross J.J. – Bern
11:15	40 Modulation of bone metabolism in young goats fed a phosphorus and/or nitrogen-reduced diet *Zillinger L.S., Hustedt K., Schnepel N., Muscher-Banse A.S. – Hanover
11:30	41 Adaption of broiler chickens to high dietary levels of free amino acids in exchange with peptide-bound amino acids *Ibrahim A., Rodehutsord M., Siegert W. – Stuttgart
11:45	42 Chemical body composition and nitrogen retention of contemporary fattening pigs fed reduced dietary nitrogen and phosphorus concentrations *Beckmüller E., Kluess J., Kölln M., Hüther L., Kersten S., Wilke V., Visscher C., Dänicke S., Grümpel-Schlüter A. – Braunschweig / Hanover
12:00	43 Relationship between neonatal glutamine supplementation, post-weaning growth and immune cell parameters in blood in a lipopolysaccharide challenge model in low birth weight piglets *Sciascia Q.L., Buchallik-Schregel J., Zeyang L., Viergutz T., Tuhscherer A., Zentek J., Metges C.C. – Dummerstorf / Berlin
12:05	44 Comparison of agreement in measuring creatinine concentrations between urine pool and urine spot samples *Padberg K., Meyer U., von Soosten D., Hüther L., Dänicke S. – Braunschweig
12:10	45 Degradation of $\beta$ -alanine in <i>in vitro</i> rumen fermentation Lan J., Hu J., Zhang S., Liu Y., Shen X., Li M., *Zhao G. – Beijing
12:15	46 Dietary supplementation of L-histidine increases the carnosine content in breast muscle of broilers under commercial rearing conditions *Siebert D., Kulig B. – Frankfurt am Main / Warsaw
12:20	Lunch and Conversation break

March 5, 2024

# Lecture hall 009

Feed additives	
16:50	35 Effect of a Phytogetic Feed Additive on the Growth Performance, Immune Response and Resistance against <i>Streptococcus agalactiae</i> of Nile Tilapia, <i>Oreochromis niloticus</i> *Bui Chau Truc D., Gruber C., Kesselring J., Standen B., Wein S. – Ho Chi Minh City / Getzersdorf
16:55	36 <i>In vitro</i> evaluation of new feed supplements exhibiting antioxidant activity *Potthast C., Klanert G., Neufeld N. – Kremsmünster / Tulln an der Donau
17:00	Poster discussion – Feedstuff evaluation and feeding / Feed additives"
17:45	END Technical Programme Day 1
18:00	See Lecture hall 008

March 6, 2024

# Lecture hall 009

09:00	See Lecture hall 008
10:00	Coffee and Conversation break
Feeding concepts	
10:30	62 Feeding and rumination behavior in small ruminants – a meta-analysis *Krone B., Hummel J., Hünerberg M. – Göttingen
10:45	63 Grass silage vs. hay - Effects on feed intake, digestibility and performance in organic dairy cows *Bauer K., Eghbali M., Hartinger T., Haselmann A., Zollitsch W., Fuerst-Waltl B., Knaus W., Zebeli Q. – Vienna
11:00	64 Comparing milk urea concentrations: reference method vs. mid-infrared *Honig A.C., Spiekens H., Baltissen I., Ettle T. – Grub / Bonn
11:15	65 Preliminary data on the human-edible feed conversion efficiency (heFCE) of lactating dairy cows with varying concentrate feed portions (CFP) in the ration *Peschel M., Padberg K., Unruh C., Bannert E., von Soosten D., Meyer U., Dänicke S. – Braunschweig
11:30	66 Effect of choice feeding of two diets differing in feed matrix and total dietary fibre content on performance and the microbiome of pigs *Schedle K., Humer C., Zwirzitz B., Domig K. – Vienna
11:45	67 Analysis of the intestinal immune reaction with respect to different postnatal feeding protocols in piglets Kriebel J., Ginoski V., Saliu E.-M., Grześkowiak L., Schulze Holthausen J., Kahlert S., Zentek J., *Rothkötter H.-J. – Magdeburg / Berlin
12:00	68 Utilization of spirulina as alternative protein source for gestating and lactating sows – effects on litter characteristics and piglet growth *Giller K., Tschannen P., Ritter S., Pendl W., Kümmerlen D., Terranova M. – Stuttgart / Zurich / Lindau
12:05	69 Nitrogen and phosphorus reduced feeding of fattening pigs – bone parameters of animals from three different farms *Schulz J., Kästner J., Dosch B., Wilkens M.R. – Leipzig
12:10	70 Investigations on the effects of feeding vetch whole plant silage to fattening pigs on fattening performance and slaughter characteristics *Witten S., Machner M.-T., Wiskandt J., Stepczynski S., Bussemas R., Aurlich K. – Westerau
12:15	71 Determining the necessary amount of milk intake for preventing weight loss in neonatal calves *Vorndran A.M., Steinhoff-Wagner J. – Freising
12:20	Lunch and Conversation break

## Carbohydrates and fibre

13:20	47	Benchmarking the organic matter digestibility and neutral detergent fibre degradability of ten different cultivars of <i>Beta vulgaris</i> L. *Koops A., Blank R., Gibbs S. J., Dickhöfer U. – Kiel / Lincoln
13:35	48	Between- and within-animal variation of ruminal pH of dairy cows fed hay and herbage with increased nonstructural carbohydrate levels *Reiche A.-M., Münger A., Dohme-Meier F. – Posieux
13:50	49	Influence of feeding alfalfa silage and a diet containing arrica montana stalks on feed intake and performance parameters of weaned piglets *Krüsselmann P., Schulze Holthausen J., Zentek J., Saliu E.-M. – Berlin
14:05	50	Effects of the inclusion of alfalfa silage or alfalfa hay in diets for weaned piglets on performance parameters *Krüsselmann P., Zentek J., Saliu E.-M. – Berlin
14:20	51	The effect of dietary fibre on lymphocyte density in colonic tissue and immune markers in colonic digesta in weaned piglets *Schulze Holthausen J., Grzeškowiak Ł., Martínez-Vallespin B., Vahjen W., Rothkötter H.-J., Zentek J., Saliu E.-M. – Berlin / Magdeburg
14:35	52	Impact of dietary fibre and weaning age on stress and immune markers in saliva in sows and their piglets *Grzeškowiak L. M., Ceron J.J., Lopez M., Martínez-Vallespin B., Schulze Holthausen J., Vahjen W., Zentek J., Saliu E.-M. – Berlin / Murcia
14:40	53	Impact of dietary fibre on piglets' colonic morphology and goblet cell distribution *Yu X., Martínez-Vallespin B., Grzeškowiak Ł., Vahjen W., Zentek J., Saliu E.-M., Schulze Holthausen J. – Berlin
14:45	54	Particle size and fermentability of dietary fibre source affect nutrient digestibility and performance in piglets *Saliu E.-M., Schulze Holthausen J., Zentek J., Martínez-Vallespin B., Vahjen W., Aschenbach J.R., Fulde M., Ghazisaeedi F., Rothkötter H.-J., Grzeškowiak L.M. – Berlin / Magdeburg
15:00	55	Glycan and protein composition alteration in intestinal mucus of TLR5-deficient piglets: how mucosal barrier gets gutted *Ghazisaeedi F., Bechtella L., Pagel K., Zentek J., Grzeškowiak Ł., Kuroпка B., Hempel B.F., Saliu E.-M., Fulde M. – Berlin
15:15	56	Influence of fibre nutrition on piglets' intestinal nutrient uptake *Das S., Schermuly I. I., Romanet S., Riedel J., Amasheh S., Saliu E.-M., Grzeškowiak Ł., Zentek J., Aschenbach J.R. – Berlin
15:20	57	Highly fermentable fiber supplementation impacts roundworm infection in pigs *Höfler P., Schlosser-Brandenburg J., Rausch S., Saliu E.-M., Kundik A., Oser L., Laubschat A., Zentek J., Hartmann S. – Berlin
15:25		Poster discussion – Amino acids and nitrogen / Carbohydrates and fibre / Gut health

## Coffee and Conversation break

## Gut health

16:00	58	Risk factors for high SARA severity in primiparous Holstein cows fed the same diet during the transition period *Hartinger T., Castillo-Lopez E., Reisinger N., Zebeli Q. – Vienna / Tulln an der Donau
16:15	59	Occurrence of Equine Gastric Ulcer Syndrome (EGUS) in horses fed hay, hay plus oats or solely with pasture access *Bachmann M., Schusser G.F., Wensch-Dorendorf M., Kershaw O., Bochnia M., Pisch C., Santo M.M., Netzker H., Schlegel A., Köhler L.M., Waitow G., Heinichen K., Zeyner A. – Halle (Saale) / Berlin / Großpönsa
16:30	60	Effect of diet on the gut-microbiome-brain-axis in a mouse model of Alzheimer's disease *Böswald L.F., Wenderlein J., Zeyner A., Bachmann M., Schäfer F., Imhof A., Popper B. – Planegg-Martinsried / Halle (Saale) / Berlin
16:45	61	Age-dependent development of the gut microbiota of two high-yielding laying hen strains during the productive lifespan *Roth C., Seifert J., Rodehutschord M., Camarinha-Silva A. – Stuttgart

17:00 END Technical Programme Day 2

## Feeding concepts – continuation

13:20	72	Evaluation of Early-Life Feed Restriction and Thermal Manipulation on the Thermotolerance and Growth Performance of Broilers under Hot Tropical Environments *Oke O.E., Oni A. I., Bello Y., Alao J.I., Ishola CA., Abioja M.O., Abiona J.A. – Abeokuta
13:35	73	Growth performance of Black soldier fly larvae as a function of principal nutrient fractions in complex substrate mixtures from regionally available agricultural and food production side-streams *Freimuth T., Mielenz M., Hüther L., Dänicke S., Daş G., Metges C.C. – Dummerstorf / Braunschweig
13:50	74	Effect of dietary protein content in isoenergetic diets on performance and life-history traits of the larvae of the Black Soldier Fly (BSFL; <i>Hermetia illucens</i> L.) *Schneider L., Schuh-von Graevenitz K., Finck J., Dusel G. – Bingen am Rhein / Leipzig
14:05	75	Recycled-mineral enriched whole black soldier fly larvae in broiler diets: impact on nutrient intakes, growth performance, blood metabolites and bone characteristics Seyedaimoosavi M.M., Daş G., Mielenz M., *Metges C.C. – Dummerstorf
14:10	76	Replacement of common cereal sources in broiler diets by non-food alternatives: Effects on performance and litter quality in two broiler lines *Köln M., Grümpel-Schlüter A., Hüther L., Kluess J., Dänicke S. – Braunschweig
14:15	77	Effects of dried alfalfa or timothy chaff or pellets fed in different proportions to oats on particle size distribution, bacterial diversity and microbial fermentation products in horse faeces Bochnia M., Pisch C., Glatter M., Wensch-Dorendorf M., Bachmann M., Santo M.M., *Zeyner A. – Halle (Saale)
14:20		Session change

## Minerals

14:25	78	Effect of dietary phosphorus deprivation during the dry period on the liver transcriptome of high yielding periparturient dairy cows *Ringsseis R., Wächter S., Cohrs I., Eder K., Grünberg W. – Giessen / Hanover / Münchweiler an der Alsenz
14:40	79	Application of a machine learning approach to estimate optimal dietary Ca and P concentrations for egg performance in laying hens *Ahmadi H., Sommerfeld V., Siegert W., Rodehutschord M. – Stuttgart / Theran
14:55	80	Influence of dietary particle size, calcium level, and phytase supplementation on gizzard pH, phytate degradation, and phosphorus digestibility in broiler chickens *Wolfrum S., Siegert W., Feuerstein D., Rodehutschord M. – Stuttgart / Ludwigshafen
15:10	81	Impact of zinc source and concentration in phytase-supplemented diets on bone traits in broiler chickens *Philippi H., Sommerfeld V., Monteiro A.R., Rodehutschord M., Olukosi O. – Stuttgart / Annecy / Athens
15:25		Poster discussion – Feeding concepts / Minerals / Energy

## Coffee and Conversation break

## Minerals – continuation

16:00	82	Relative abundance and differential correlation of gut microbiota in broilers fed two zinc sources and exogenous phytase *Rubio-Cervantes I., Philippi H., Rodehutschord M., Camarinha-Silva A. – Stuttgart
16:15	83	Tissue manganese distribution under subclinical zinc deficiency of weaned piglets and its potential regulation by mechanisms of zinc homeostasis *Brugger D., Hanauer M., Ortner J., Windisch W. – Zurich / Freising
16:30	84	The effects of various concentrations of a porous zinc source in diets with low acid binding capacity with different crude protein concentrations on growth performance of weaned piglets *Riedmüller J., Monteiro A.R., Faccin J.E.G., Saliu E.-M., Tokach M., Zentek J. – Berlin / Annecy / Manhattan
16:35		Session change

## Energy

16:40	85	New data on the interaction between bone and energy metabolism in transition cows *Kononov S.U., Meyer J., Frahm J., Meyer U., Huber K., Dänicke S., Rehage J., Wilkens M.R. – Leipzig / Braunschweig / Stuttgart / Hanover
16:55	86	A cluster analysis reveals different metabolic types of primiparous dairy cows during early lactation *Khiaosa-ard R., Hartinger T., Castillo-Lopez E., Zebeli Q. – Vienna
17:00		END Technical Programme Day 2

## Lecture hall 008

Wednesday,

17:05	See Lecture hall 009
17:50	See Lecture hall 009
18:45	GfE Member Assembly (seperate invitation required)
21:00	END Day 2

## Lecture hall 008

Thursday

Others	
09:00	87 Impact of lameness on water intake, health and performance of lactating dairy cows <i>*Bannert E., Peschel M., Padberg K., Unruh C., Frahm J., Kersten S., Billenkamp F., von Soosten D., Meyer U., Dänicke S. – Braunschweig</i>
09:15	88 Exterior indicators of milk-fed and milk-deprived suckling calves <i>*Kurek J., Liegsalz T.M., Vorndran A.M., Kurek A., Huber V., Hammerl G., Spiekers H., Steinhoff-Wagner J. – Freising / Grub / Achselschwang</i>
09:20	89 Impact of a two-stage rumen cannulation on the rumen function and health of dairy cows <i>*Hartinger T., Beissel L., Wittek T., Zebeli Q. – Vienna</i>
09:25	Session change
Omics in animal physiology	
9:30	90 Myo-inositol feeding changes amino acid, amino acid derivative and acylcarnitine concentrations in plasma of two contrasting high-yielding laying hen strains <i>*Szentgyörgyi Á., Sommerfeld V., Rodehutsord M., Huber K. – Stuttgart</i>
9:45	91 Analysis of liver transcriptomic responses to mixed parasite infections in three chicken genotypes with different growth rates <i>Oladosua O.J., Reyer H., Weikard R., Metges C.C., Kühn C., *Daş G. – Dummerstorf / Greifswald</i>
10:00	92 Influence of Cryptosporidium parvum infection on intestinal epithelial cholesterol metabolism in neonatal calves <i>*Veshkini A., Dengler F., Bachmann L., Liermann W., Helm C., Ulrich R., Dellling C., Kühn C., Hammon H.M. – Dummerstorf / Vienna / Neubrandenburg / Leipzig / Greifswald</i>
10:15	93 Comparative study of microRNA profiles in plasma and colostrum of Holstein cows and their calves <i>*Kreuzer-Redmer S., Paratscha M., Ricci S., Castillo-Lopez E., Hartinger T., Reisinger N., Zebeli Q. – Vienna / Tulln an der Donau</i>
10:30	94 Correlations between volatile organic compounds of exhaled breath and blood metabolites of lactating dairy cows <i>*Eichinger J., Reiche A.-M., Mürger A., Fuchsmann P., Huber K., Dohme-Meier F. – Posieux / Stuttgart / Bern</i>
10:45	95 Investigation of the suitability of exhaled volatile organic compounds to discriminate different diets in lactating dairy cows <i>*Eichinger J., Reiche A.-M., Mürger A., Fuchsmann P., Pimentel G., Huber K., Dohme-Meier F. – Posieux / Stuttgart / Bern</i>
10:50	Poster discussion – Others / Omics in animal physiology
Coffee and Conversation break	

March 6, 2024

## Lecture hall 009

Energy	
17:05	Keynote speech "Successful young scientists don't grow on trees": Strategies for the targeted promotion of young scientists <i>Alber G. – Leipzig</i>
17:50	Stand-up talks: Scientists from different research institutions get to know each other (seperate registration required)
18:45	See Lecture hall 008

March 7, 2024

## Lecture hall 009

Environmental effects	
9:00	96 Assessing the relationship between SCFA and CH <sub>4</sub> , and ruminal redox balance incubating grass and corn silages via Hohenheim Gas Test <i>*Zhang X., Klevenhusen F., Clauss M., Hummel J. – Witzenhausen / Zurich / Göttingen</i>
9:15	97 Deviation of dry matter intake of dairy cows from estimated values under heat stress <i>Köhler L.M., Wensch-Dorendorf M., Herz R., Wilkens M.R., Zeyner A., Richardt W., Heinichen K., *Schulz J. – Halle (Saale) / Lichtenwalde / Großpösna / Leipzig</i>
9:30	98 Effects of protein content reduction using essential amino acids in broiler diets on performance-based environmental impacts <i>*Wilke V., Gickel J., Ullrich C., Visscher C. – Hanover / Vechta</i>
9:45	99 Inter-farm evaluation of the environmental burden of zinc and copper in broiler diets - a literature review <i>*Liegsalz T.M., Paulicks B., Steinhoff-Wagner J. – Freising</i>
9:50	Session change
Nutrition and inflammation	
9:55	100 Water, land and carbon footprints of Chinese dairy systems, Footprints of milk, beef and manure produced in traditional grazing, mixed and industrial systems in China <i>*Yi J., Gerbens-Leenes P.W., Guzmán-Lunac P. – Groningen / Issy-les-Moulineaux</i>
10:10	101 Effects of dietary L-carnitine supplementation on white blood count and leukocyte functionality of mid-lactating dairy cows during standardized lipopolysaccharide-induced inflammation <i>*Seemann L., Frahm J., Kersten S., Bühler S., Meyer U., Visscher C., Dänicke S. – Braunschweig / Hanover</i>
10:25	102 Short-term effects of thermal heat and LPS-challenge on inflammatory cytokines and Toll-like receptor 4 signaling in bovine leukocytes of mesenteric lymph nodes – an <i>in vitro</i> study <i>*Koch F., Kuhla B. – Dummerstorf</i>
10:40	103 Systemic inflammatory response to lipopolysaccharide stimulation in pigs fed high and low fiber diets <i>*Cavalleri M., Sciascia Q.L., Vernunft A., Oster M., Kersten S., Dänicke S., Metges C.C. – Dummerstorf / Braunschweig</i>
10:55	Poster discussion – Environmental effects
Coffee and Conversation break	

## Lecture hall 008

Thursday

11:30	Workshop – Global challenges and perspectives in livestock nutrition
11:30	Introduction <i>Aschenbach J.R. – Berlin</i>
11:35	Current developments on the agricultural markets: Consequences for livestock nutrition <i>Hess S. – Stuttgart</i>
12:10	Political, social and ecological challenges for livestock husbandry <i>Balmann A. – Halle (Saale)</i>
12:45	Circularity pathways towards a more sustainable livestock production <i>Windisch W. – Freising</i>
13:20	The Water footprint of livestock products <i>Gerbens-Leenes P.W. – Groningen</i>
13:55	Closing remarks <i>Aschenbach J.R. – Berlin</i>
14:15	End of conference

March 7, 2024

## Lecture hall 009

11:30 See Lecture hall 008

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