Agenda | 3rd French-German Maize Breeders School

Tuesday November 3rd		
08:00-08:30	**Registration**	
08:30-08:40	**Welcome: Frank Hochholdinger**	
SESSION 1: Genomics, Prediction and Innovation in Modern Maize Breeding | Chair: Chris-Carolin Schön		
08:40	**Laurence Moreau (Paris)**	**Revisiting hybrid breeding using genomic and phenomic selection in reciprocal breeding designs**
09:10	Silke Wieckhorst (KWS)	From genomics to genetic gain: Accelerating maize improvement with breeding technologies
09:30	Everton Brenner (Syngenta)	Revisiting Early Stages Hybrid Testing with Genomics
09:50	Yan Cheng Lin (München)	Nonlinear genomic selection indices for directional and stabilizing selection
10:10	Sam Trachsel (Corteva)	Strategies for Maize (Zea mays L.) Hybrid Selection, Volume Planning and Positioning: A Data-Driven Framework Using Modern Portfolio Theory in combination with GEBV
10:30	Renaud Rincent (Gif-sur-Yvette)	Integration of multi-omics data to model the genetic architecture of genotype x environment interactions
10:50 - 11:20	**Coffee break**	
SESSION 2: Genetic Diversity, Adaptation and Breeding Resources | Chair: Alain Charcosset		
11:20	**Markus Stetter (Köln)**	**The Power and Genetic Signatures of Human-Driven Selection in Crops**
11:50	Alain Murigneux (Limagrain)	What can we learn from the evolution of the Maize breeding over the last decades?
12:10	Chris-Carolin Schön (München)	Leveraging maize landrace diversity to increase genetic variation for quantitative traits
12:30-13:30	**Lunch**	
13:30	Stéphane Nicolas (Gif-sur-Yvette)	Boosting characterization of maize landraces by combining genomic prediction and ecogenetics
13:50	Anurag Daware (Hohenheim)	From Genebank to Breeding: Tracing local adaptation and demographic history to uncover breeding-relevant adaptive variation in Peruvian maize landraces
14:10	Andrea R.M. Calhau (Lyon)	Double fertilization defects in maize haploid inducer lines
SESSION 3: Molecular Basis of Heterosis, Development and Plant Architecture | Chair: Michaela Matthes		
14:30	**Thomas Widiez (Lyon)**	**Elucidating maize haploid inducer lines: from QTL cloning to molecular mechanisms**
15:00	Johan Zicola (Göttingen)	Maize nucleolus organizer region is involved in heterosis
15:20	Danning Wang (München)	Single-cell transcriptomics reveals outer root cells signatures of heterosis in early roots of maize
15:40-16:10	**Coffee break**	
16:10	Yves Gibon (Bordeaux)	Predictive metabolomics sheds light on the effect of selection on leaf metabolism in maize
16:30	Cecilia Lara-Mondragon (Tübingen)	Leveraging maize natural variation to uncover novel factors shaping meristem architecture
16:50	Romain Kadoumi (Limagrain)	Local homozygosity in a heterotic setting: How incomplete parental divergence shapes maize hybrid performance
17:10	**End of day 1**	
18:00-19:00	**Visit of the Neanderthal exhibition in the LVR-Landesmuseum Bonn, Colmantstraße 14 - 16, 53115 Bonn**	
19:00	**Conference Dinner in the restaurant DelikArt in the LVR-Landesmuseum Bonn**	

Wednesday, November 4th		
SESSION 4: Root Systems, Nutrition and Environmental Resilience | Chair: Julie Fievet		
09:00	**Michaela Matthes (Bonn)**	**Boron nutrition in maize: From cell wall chemistry to yield stability**
09:30	Ivan Lopez-Valdivia (Gatersleben)	Moving Beyond Indiscriminate Plasticity to Harness Specific Root Trait Responses for Stable Crop Yields
09:50	Christophe Maurel (Montpellier)	Genetic architecture of maize root hydraulics
10:10	Julie Fievet (Paris)	Maize genetic diversity and root symbiosis
10:30	**Coffee break**	
11:00	Wanda Haller (Hohenheim)	Evaluation of maize testcross hybrid performance under low and high phosphorus fertilization regimes
11:20	Karina van der Linde (Regensburg)	A hot mess? Climate change, corn smut, and maize development
11:40	**Concluding remarks: Frank Hochholdinger & Julie Fievet**	
12:00	End of Conference	