Monday, 15 May 2023

	Atrium	MOA 5	MOA 4	MOA 3			
09:00	Registration						
10:45		Open Ceremony, Greetings					
11:00		Plenary Lecture: Marcel van der Heijden (Agroscope) "Soil as a sustainable resource: microbiome engineering, pesticides and soil multifunctionality in agro-ecosystems"					
12:00	Lunch b	unch break					
13:00		2.1: Carbon and nutrient cycling in soils: Processes and interactions in a changing world - Effect of climate change on C & N dynamics Chair: Nicolas Brüggemann (Forschungszentrum Juelich/IBG-	5.1: Model-based prediction of the dynamics of soil functions - Model approaches and tools Chair: Andrea Schnepf (Forschungszentrum Jülich GmbH - IBG3)	4.1: Soil degradation and sustainable soil management in agricultural landscapes - Soil degradation by soil erosion <i>Chair: Michael Kuhwald (Institute of Geography, CAU Kiel)</i>			
			Keynote: Katharina Meurer (Swedish University of Agricultural Sciences, Uppsala) Modelling the linkages of soil structure dynamics, carbon cycling, hydrological processes and crop production				
14:30	Coffee	fee break					
15:00	Poster	ster session: Topics 2, 4, 5, 8					
16:30		Chair: Michaela Dippold (Geo-Biosphere Interactions,	5.2: Model-based prediction of the dynamics of soil functions - Model applications and predictions Chair: Sara König (Helmholtz Centre for Environmental Research - UFZ)	4.2: Soil degradation and sustainable soil management in agricultural landscapes - Soil degradation by soil erosion Chair: Michael Kuhwald (Inst. of Geography, CAU Kiel) Keynote: Peter Fiener (Augsburg University) Landscape scale spatial patterns of soil degradation, soil organic carbon stocks and corresponding biomass production following long-term soil redistribution			

Tuesday, 16 May 2023

08:00	Registration		
08:30	2.3: Carbon and nutrient cycling in soils: Processes and interactions in a changing world - Various processes involved in soil nutrient dynamics Chair: Michaela Dippold (Geo-Biosphere Interactions, Department of Geosciences, University of Tuebingen)	8.1: Data challenges and solutions - From data infrastructures to solution oriented applications Chair: David Russell (Senckenberg Institute for Biodiversity Research)	4.3: Soil degradation and sustainable soil management in agricultural landscapes - Threats and opportunities for soil health Chair: Eva Lehndorff (Soil Ecology, Bayreuth University)
		Keynote: Fenny van Egmond (ISRIC World Soil Information, Wageningen) Data challenges and solutions: a closer look at soil data challenges and infrastructures	
.0:00	Coffee break		
10:30	2.4: Soil carbon amendments, dynamics & sequestration <i>Chair: Nicolas Brüggemann (FZ Juelich)</i>	functions - Impact of crop roatation agricultural landscapes - Sustainable soil ma	4.4: Soil degradation and sustainable soil management in agricultural landscapes - Sustainable soil management Chair: Michael Kuhwald (Institute of Geography, CAU Kiel)
	<i>Keynote: Johannes Lehmann (Cornell University)</i> Circular Bionutrient Economy: biochar-based fertilizer for nutrient recycling		

12:00	^{2:00} Lunch break								
13:00	Poster session: Topics 1, 3, 6, 7								
14:30	³⁰ Coffee break exhibition								
15:00 16:00	Panel discussion: Soil based solutions: managing conflicting demand for soil services Torsten Kurth (Boston Consulting Group), Ivo Degn (Climate Farmers), Harald Ginsky (UBA), Gabriel Moinet (Wageningen University). Chair: Katharina Helming (ZALF)								
19:00	Conference Dinner (at MOA restaurant)								
Wed	nesday, 17 May 2023								
08:00	^{18:00} Registration								
08:30	1.2: Impact of agriculture and cropping systems on soil functions - Nutrients and the soil biome Chair: Sandra Spielvogel (Soil Science, Christian-Albrechts-University Kiel)	7: Soils as a key to climate change mitigation: private and public governance instruments to unlock the potential Chair: Martin Wiesmeier (Helmholtz Centre for Environmental Research - UFZ)	3.1: Soil biomes and multifunctionality of soils - Soil microbiomes as catalysts for energy and matter fluxes in soil <i>Chair: Michael Schloter (Helmholtz Zentrum München,</i> <i>Deutsches Forschungszentrum für Gesundheit und Umwelt</i> <i>GmbH)</i>						
		Keynote: Ana Frelih Larsen (Ecologic Institute, Berlin) Soils and climate change mitigation: priorities and the required policy mix in the EU	Keynote: Naoise Nunan (Sorbonne University, Paris) Energetic and abiotic constraints on soil microbial community activities						
10:00	Coffee break								
10:30	 1.3: Impact of agriculture and cropping systems on soil functions - Soil health and carbon Chair: Katharina Helming (Leibniz Centre for Agricultural Landscape Research (ZALF)) Keynote: Rachel Creamer (Wageningen University & Research) Quantifying Soil Health throughout Europe 	6.1: Using soil sensing technologies for soil mapping, modelling and decision making in agriculture - Sensor data processing and sensor applications Chair: Marco Lorenz (Thünen Institute of Agricultural Technology)	3.2: Soil biomes and multifunctionality of soils - Microbes and their role for plant health Chair: Barbara Reinhold-Hurek (Laboratory of General Microbiology, University of Bremen)						
12:00	Lunch break								
13:00	1.4: Impact of agriculture and cropping systems on soil functions - Cover cropping and soil structure <i>Chair: Rita Grosch (Leibniz Institute of Vegetable and</i> <i>Ornamental Crops (IGZ))</i>	6.2: Using soil sensing technologies for soil mapping, modelling and decision making in agriculture - Novel sensor technologies for soil sensing Chair: Sebastian Vogel (Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB))	3.3: Soil biomes and multifunctionality of soils - Plant-soil feedbacks Chair: Sylvia Schnell (Justus Liebig University Gießen)						
		Keynote: Abdul Mouazen (Gent University) The Role or Proximal Soil Sensing Technologies and Data Fusion Modelling in Precision Management of Farming Input Resources							
14:30	Coffee break								
15:00	Closing Session, Young Scientist Awards & Farewell								
15:30		BonaRes Data Management Workshop – "Data Publication and Reuse"							