Interdisciplinary ECOSENSE ring lectures 2023
Time: 13:00- 17:00 (afterwards joint pub visit planned)

Buildings are all located on the campus of the Technical Faculty along Georges-Köhler-Allee

PI	Lecture Title	Faculty	Date	Location
Werner	Impact of tree adaptations on ecosystem processes	UNR	26.01.2023	IMBIT- Nexus Lab (Build. 201)
Wallrabe	Microsystem technologies and their outdoor challenges	TF		
Lang/ Schack-Kirch	Atmosphere of soils: The mirror of belowground life	UNR	09.02.2023	IMBIT- Nexus Lab (Build. 201)
Schmitt	Photoacoustic gas sensors in climate research	TF		
Christen	Strategies to partition integrated ecosystem eddy-fluxes of CO2 into photosynthesis and respiration	UNR	02.03.2023	SR 01-009/13 (Build. 101)
Wöllenstein	Basics of laser spectroscopy and isotope determination	TF		
Grote	From physiological processes to forest development - Addressing the scaling issue with complex ecosystem models	KIT - Met	16.03.2023	HS 036 (Build. 101)
Kiese	Environmental monitoring – linking measurements and modelling for bridging scales	KIT - Met		
Jouda	Introduction to NMR hardware	KIT- Tech	23.03.2023 in KARLSRUHE	KA
Korvink	Introduction to NMR imaging and spectroscopy	KIT- Tech		
Haberstroh	Species interactions and drought in forests	UNR	20.04.2023	FIT (Build. 105)
Rühe	Sensors alone in the forest. How to protect their surfaces	TF		
Koch	Assessment of forest stands structures from different platforms	UNR	04.05.2023	FIT (Build. 105)
Reiterer	LiDAR for reconstruction in 3D	TF		
Weiler	Soil moisture and root water uptake: processes and measurement methods	UNR	25.05.2023	FIT (Build. 105)
Woias	Energy-optimized operation of embedded sensor systems	TF		
Dormann	What is correct, our measurements or our models or neither? Embedding process knowledge in deep learning	UNR	29.06.2023	02-016 (Build. 101)
Comella	Optical sensing elements and their application for tree monitoring	TF		
Kreuzwieser	Ecological significance of volatile organic compounds (VOC) from plants	UNR	13.07.2023	FIT (Build. 105)
Prucker	Surface attached hydrogel layers as anti-biofouling coatings	TF		
Göritz	Hyperspectral remote sensing of forests - prospects and challenges	UNR	27.07.2023	FIT (Build. 105)
Rupitsch	Communication between embedded sensor systems	TF		

Organization

- 1st lecture à 45-60 minutes (presentation + discussion)
- coffee break
- 2nd lecture à 45-60 minutes (presentation + discussion)
- lab tour of appr. 1 hr
- possibility for a joint end of the day