

Session 3.2 Biomechatronics

Time: Tuesday, 05.09.2023

Location: Humboldtbaue, Seminary Room HU-204

Chairmen: R. L. Stoeterau (BR-São Paulo) / E. Andrada (D-Jena)

1:30 p.m.	T. Helbig, H. Witte (D-Ilmenau)
Methods to investigate the acoustic properties of the outer ear canal	
1:50 p.m.	P. Jünemann, A. Schneider, J. Waßmuth (D-Bielefeld)
Comparative study of a bio-inspired sound source localization algorithm and a standard beamformer	
2:10 p.m.	Raman, S. Labisch, J.-H. Dirks (D-Bremen), H. Witte (D-Ilmenau)
Ultrastructure, biomechanics and biomimetic potential of starfish skeletons	
2:30 p.m.	S. Köhring (D-Ilmenau)
A contribution to forest monitoring, here the dendrometry	
2:50 – 3:10 p.m. Coffee break and Visits of Expositions	
3:10 p.m.	T. Helbig, J. David, S. Lutherdt, H. Witte (D-Ilmenau)
Measuring kinematic parameters of the human hand for application in human-machine-Interaction	
3:30 p.m.	M. Jäger, T. Helbig, H. Witte (D-Ilmenau)
Control for non-linear compliant actuation of an upper arm exoskeleton	
3:50 p.m.	L. Schaeffer, D. Herrmann, V. Böhm (D-Regensburg)
Theoretical considerations on a 2d compliant Tensegrity joint Structure in context of a Biomedical Application	
4:10 p.m.	C. Hönemann, S. Lutherdt, H. Witte (D-Ilmenau)
Digital examination in bio-oriented courses at Technische Universität Ilmenau	



4:30 p.m.	J. Steinz, S. Lutherdt, H. Witte (D-Ilmenau)
Concept for the measurement of vital parameters during the use of an infrared cabin to investigate physiological effects and to individualize the sauna session	
End of Session	

