

Monday, 03.09.2018		
18:00	<p align="center"><b>Welcome Reception</b> SuperC, 6<sup>th</sup> Floor</p>	
Tuesday, 04.09.2018		
08:00	<p align="center"><b>Registration</b></p>	
08:45-09:15	<p align="center"><b>Opening ceremony and reception</b> Conference Chairman: B. Corves   IFToMM President: M. Ceccarelli   Dean of Mechanical Engineering Faculty: J. Feldhusen</p>	
09:20-10:05	<p align="center"><b>Keynote</b> <i>Dr.-Ing. S. Kurtenbach, Trapo AG: Flexibility and Digitization – An SMEs point-of-view</i></p>	
10:10-11:25	<p align="center"><b>Session A1.1</b> <b>Control issues of mechanical systems</b> Chair: B. Lian</p>	<p align="center"><b>Session B1.1</b> <b>Linkages and cams (1)</b> Chair: O. Altuzarra</p>
	<p><i>I. Ansoategui, F. J. Campa</i> <b>Mechatronic model based jerk optimization in servodrives with compliant load</b> (pp. 45 – 52)</p> <p><i>E. Sayar, H. Metin Ertunç</i> <b>Fuzzy Logic Controller and PID Controller Design for Aircraft Pitch Control</b> (pp. 53 – 60)</p> <p><i>M. Stoltmann, P. Froitzheim, N. Fuchs, C. Woernle</i> <b>Flatness-Based Flatness-Based Feedforward Control of a Crane Manipulator with Four Load Chains</b> (pp. 61 – 68)</p>	<p><i>S. Goessner</i> <b>Fundamentals for Web-Based Analysis and Simulation of Planar Mechanisms</b> (pp. 215 – 222)</p> <p><i>J. Ondrášek</i> <b>Effect of the roller crown shape on the cam stress</b> (pp. 223 – 230)</p> <p><i>N. Duc Sang, Y. Takeda, D. Matsuura, Y. Sugahara</i> <b>Kinematic Design of Five-bar Parallel Robot by Kinematically Defined Performance Index for Energy Consumption</b> (pp. 239 – 247)</p>
11:25-11:45	<p align="center"><b>Coffee break</b></p>	
11:45-13:25	<p align="center"><b>Session A1.2</b> <b>Dynamics of multi-body systems</b> Chair: C. Woernle</p>	<p align="center"><b>Session B1.2</b> <b>Experimental mechanics</b> <b>History of mechanism science</b> Chair: H. Terada</p>
	<p><i>F. Marques, H. Magalhães, J. Ambrosio, P. Flores</i> <b>Approach for Conformal Contact Detection for Wheel-Rail Interaction</b> (pp. 71 – 78)</p> <p><i>J. Meijaard, V. van der Wijk</i> <b>The Equations of Motion of a Four-Bar Linkage with Principal Vectors and Virtual Work</b> (pp. 79 – 87)</p> <p><i>M. Wang, T. Wu, J. Lee</i> <b>Motion Analysis of Planar Flexible Mechanisms Using Vector Form Method</b> (pp. 88 – 96)</p> <p><i>H. Uriarte, I. Fernández de Bustos, G. Urkullu, A. Olabarrieta</i> <b>On Classical Newmark Integration of Multibody Dynamics</b> (pp. 97 – 105)</p>	<p><i>M. Komori, K. Matsuda</i> <b>Velocity Characteristics of Active Omni Wheel Considering Transmitting Mechanism</b> (pp. 109 – 116)</p> <p><i>C. A. González-Cruz, Marco Ceccarelli, Juan Carlos Jauregui</i> <b>Experimental analysis of the dynamic behavior of a non-stationary two stage planetary gearbox</b> (pp. 117 – 125)</p> <p><i>A. Vukolov</i> <b>Forgotten Facility: the Pneumatic Tube Mail System in Russian State Library</b> (pp. 147- 154)</p> <p><i>L. Klimina, M. Dosaev, Y. Selyutskiy</i> <b>A vehicle driven upwind by the Horizontal Axis Wind Turbine</b> (pp. 155 – 161)</p>

13:30-14:30	<b>Lunch break</b>	
14:45-16:00	<b>Session A1.3</b> <b>Mechanics of robots and manipulators (1)</b> <b>Chair: C.-H. Kuo</b>	<b>Session B1.3</b> <b>Theoretical kinematics (1)</b> <b>Chair: G. Kiper</b>
	<i>T. Weiser, B. Corves</i> <b>Deflection Modeling of a Manipulator for Mechanical Design</b> (pp. 309 – 316)	<i>J.-P. Merlet</i> <b>Some properties of the Irvine cable model and their use for the kinematic analysis of cable-driven parallel robots</b> (pp. 409 – 416)
	<i>D. Chablat, E. Ottaviano, S. Venkateswaran</i> <b>Self-Motion of the 3-PPPS Parallel Robot with Delta-Shaped Base</b> (pp. 317 – 324)	<i>S. Sumi, V. Böhm, L. Zentner, K. Zimmermann, P. Schorr</i> <b>Compliant class 1 tensegrity structures for gripper applications</b> (pp. 392 – 399)
	<i>T. Stigter, M. Pfurner, M. Husty</i> <b>Workspace and Singularity Analysis of a 3-RUU Parallel Manipulator</b> (pp. 325 – 332)	<i>K. Xu, J. Deng, G. Wu, J. Li, H. Shen</i> <b>Design of 3-DOF Zero Coupling Degree Planar Parallel Manipulator Based on Coupling-reducing and Its Kinematic Performance Improvement</b> (pp. 400 – 408)
16:00-16:15	<b>Coffee break</b>	
16:15-17:05	<b>Session A1.4</b> <b>Haptic systems</b> <b>Chair: M. Raghavan</b>	<b>Session B1.4</b> <b>Mechanical transmissions and gears (1)</b> <b>Linkages and Cams (2)</b> <b>Chair: M. Pleguezuelos</b>
	<i>E. Moberj, I. Görgülü, M. I. C. Dede</i> <b>Experimental Evaluation of Actuation and Sensing Capabilities of a Haptic Device</b> (pp. 137 – 144)	<i>A. Ozhiken, K. Ivanov, M. Ceccarelli, D. Cafolla, C. A. González-Cruz</i> <b>Design and experiences of a planetary gear box for adaptive drives</b> (pp. 284 – 291)
	<i>I. Görgülü, G. Kiper, M. I. C. Dede</i> <b>A Critical Review of Unpowered Performance Metrics of Impedance-Type Haptic Devices</b> (pp. 129 – 136)	<i>K. Kuprianoff, C. Shutova, A. Vukolov</i> <b>Free Computer Algebra Software and Its Application on Calculative and Graphic Tasks in TMM Course of Bauman University</b> (pp. 248 – 255)
17:15	<b>Group Photo</b>	
17:30-18:30	Meeting of EuCoMeS Steering Committee	
19:30	<b>Conference Dinner</b>	

## Wednesday, 05.09.18

09:00 - 09:45	<b>Keynote</b> <b>Dr.-Ing. F. Allmendinger, Kuka Germany: Program the task, not the robot!</b>	
09:50-11:30	<b>Session A2.1</b> <b>Industrial and non-industrial applications</b> <b>Chair: M. Ceccarelli</b>	<b>Session B2.1</b> <b>Theoretical kinematics (2)</b> <b>Chair: P. Wenger</b>
	<p><i>M. Raghavan, A. Balhoff</i>  <b>Electrical Torque Addition Mechanism for Engines with High Levels of EGR</b> (pp. 165 – 172)</p> <p><i>K. Makino, K. Ishida, H. Watanabe, Y. Suzuki, S. Kotani, H. Terada</i>  <b>Motion Planning of a Rotation Type Peach Fruit Moth Inspection System</b> (pp. 173 – 180)</p> <p><i>P. Garcia, J. Sánchez-Espiga, A. Fernandez-del-Rincon, A. De-Juan, M. Iglesias, A. Diez-Ibarbia, F. Viadero</i>  <b>Access systems to marine energy production units. Review and new challenges</b> (pp. 181 – 188)</p> <p><i>P. Fiser, P. Jirásko, M. Vaclavik</i>  <b>Radial cam grinder with a camera inspection system</b> (pp. 189 – 196)</p>	<p><i>H. Lins Vieira, M. da Silva</i>  <b>Estimating the Probability of Failures of a 3RRR Manipulator using a Metamodel</b> (pp. 384 – 391)</p> <p><i>M. Furet, A. van Riesen, C. Chevallereau, P. Wenger</i>  <b>Optimal design of tensegrity mechanisms used in a bird neck model</b> (pp. 365 – 375)</p> <p><i>P. Zsombor-Murray</i>  <b>Stationary Distance between Spatial Conics</b> (pp. 376 – 383)</p> <p><i>Ş. Gür, C. Karagöz, G. Kiper, K. Korkmaz</i>  <b>Synthesis of Scalable Planar Scissor Linkages with Anti-Parallelogram Loops</b> (pp. 417 – 424)</p>
11:30-12:15	<b>Lunch</b>	
12:30	Departure for excursion	
	<b>Excursion</b>	

## Thursday, 06.09.18

09:30-10:45	<p style="text-align: center;"><b>Session A3.1</b> <b>Biomedical Applications (1)</b> <b>Chair: A. Pisla</b></p>	<p style="text-align: center;"><b>Session 3.1</b> <b>Linkages and Cams (3)</b> <b>Chair: S. Goessner</b></p>
	<p><i>A. Yakovenko, I. Goryacheva, M. Dosaev</i> <b>Contact Characteristics of Medical Forceps Indentation to Soft Tissue</b> (pp. 3 – 10)</p> <p><i>E.-C. Gerding, G. Carbone, D. Cafolla, M. Russo, M. Ceccarelli, S. Rink, B. Corves</i> <b>Design of a Finger Exoskeleton for Motion Guidance</b> (pp. 11 – 18)</p> <p><i>H. Terada, K. Makino, K. Ishida, T. Ogura</i> <b>Development of a knee joint assistive-mechanism adapted for bilateral roll-back motion</b> (pp. 19 – 26)</p>	<p><i>A. Fomin, S. Kiselev, A. Jahr, H. Sim</i> <b>Development of a novel low-profile linkage-based sickle drive</b> (pp. 199 – 206)</p> <p><i>O. Altuzarra, D. Caballero Guedes, F. J. Campa, C. Pinto</i> <b>Forward and Inverse Kinematics in 2-DOF Planar Parallel Continuum Manipulators</b> (pp. 231 – 238)</p> <p><i>V. Pozhbelko</i> <b>Advanced Technique of Type Synthesis and Construction of Veritable Complete Atlases of Multiloop F-DOF Generalized Kinematic Chains</b> (pp. 207 – 214)</p>
10:45 - 11:15	<b>Coffee break</b>	
11:20 - 12:35	<p style="text-align: center;"><b>Session A3.2</b> <b>Biomedical Applications (2)</b> <b>Chair: P. Flores</b></p>	<p style="text-align: center;"><b>Session B3.2</b> <b>Mechanical transmissions and gears (2)</b> <b>Chair: A. Fomin</b></p>
	<p><i>B. Gherman, I. Birlescu, F. Puskas, A. Pisla, G. Carbone, P. Tucan, D. Pisla</i> <b>A kinematic characterization of a parallel robotic system for lower limb rehabilitation</b> (pp. 27 – 34)</p> <p><i>E. Corral, F. Marques, M. J. Gómez, P. Flores, J. C. Garcia-Prada</i> <b>Passive Walking Biped Model with Dissipative Contact and Friction Forces</b> (pp. 35 – 42)</p>	<p><i>I. Heras, J. Aguirrebeitia, M. Abasolo, I. Coria</i> <b>Load distribution in four-point contact slewing bearings considering manufacturing errors and ring flexibility</b> (pp. 267 – 274)</p> <p><i>Y. Zhao, X. Sun</i> <b>On Meshing Limit Line of ZC1 Worm Pair</b> (pp. 292 – 298)</p> <p><i>M. Pleguezuelos, M. B. Sánchez, J. I. Pedrero</i> <b>Load transfer among spur gear teeth with tip relief under non-nominal loading conditions</b> (pp. 299 – 306)</p>
12:40 - 13:40	<b>Lunch</b>	
13:45 - 15:25	<p style="text-align: center;"><b>Session B3.3</b> <b>Mechanics of robots and manipulators (2)</b> <b>Chair: M. Husty</b></p>	
	<p><i>H. Shen, Z. Xu, K. Xu, S. Bai, J. Deng, G. Wu, T.-L. Yang</i> <b>Design and Direct Position Analysis of a New 3T1R Parallel Manipulator with Low Coupling Degree</b> (pp. 333 – 339)</p> <p><i>X. Huo, B. Lian, T. Sun, Y. Song</i> <b>Parameterized Inverse Kinematics of Parallel Mechanism Based on CGA</b> (pp. 340- 346)</p> <p><i>K. Arrouk, B. Chedli Bouzgarrou, G. Gogu</i> <b>On the full-spin dexterous orientation workspace of spherical parallel robots of 3-RRR-type</b> (pp. 347 – 354)</p> <p><i>E. Shahabi, C.-H. Kuo</i> <b>Solving Inverse Kinematics of a Planar Dual-Backbone Continuum Robot Using Neural Network</b> (pp. 355 – 361)</p>	
15:30 - 16:00	<b>Best Paper Award and Closing Ceremony</b>	