

## TUESDAY, JUNE 14

- 8.00 ● Registration | *Europaplatz 1, 9500 Villach*
- 9.00 ● Welcome Notes | *Alexander Pogany (BMK), Peter Reichel (OVE), Mathias Brandstötter (GMAR Robotics), Lisa-Marie Faller (FH Kärnten, ADMiRE)*
- 9.25 ● Keynote 1: Margit Gföhler (TU Wien) | *Robotic Exoskeletons as Assistive Devices*
- 10.05 ● Keynote 2: Alexander Kollreider (tyromotion) | *Robots in Movement Therapy - Possibilities and Limits*
- 10.45 ● Coffee Break
- 11.00 ● Screen-printed Stretchable Capacitive Pad for Tactile and Proximity Sensing | *M. Alshwabkeh, H. Alagi, S. Escaida-Navarro, C. Duriez, B. Hein and L.-M. Faller*
- 11.20 ● SVM Classification of EMG Signals for Control of a Robotic Hand | *J. Ziegler, M. Kallinger, H. Gattringer and A. Müller*
- 11.40 ● An Evaluation of Mask Estimation Methods for Transparent Objects | *V. Rettner, J.-B. Weibel and M. Vincze*
- 12.00 ● Grasping the Inconspicuous | *H. Gupta, S. Thalhammer, M. Leitner and M. Vincze*
- 12.20 ● Lunch
- 13.30 ● Keynote 3: Bernhard Rinner (AAU Klagenfurt) | *Multi-Robot Coordination*
- 14.10 ● Comparing Supervised and Unsupervised Machine Learning Methods for Traffic Sign Classification | *P. Hönig, L. Muster, M. Aburaia and W. Wöber*
- 14.30 ● Evaluation of Reinforcement Learning Algorithms for the Online 3D Bin Packing Problem | *J. Gottwald, P. Streck, M. Beinhofer, M. Hofmarcher and M. Widrich*
- 15.50 ● Estimation of Robot-Specific Parameters for Robot Motion Models | *L. Zinkanell, M. Eder and G. Steinbauer-Wagner*
- 15.10 ● Time-Optimal Swing-Up Trajectory Optimization for a Spherical Inverted Pendulum Mounted on a Linear Robot | *S. Schmidt, H. Gattringer and A. Müller*
- 15.30 ● Coffee Break
- 15.45 ● Poster Pitches | *Session Chair: Wilfried Kubinger (FH Technikum Wien), Teasers of all Poster Presenters (1 min. each)*
- 16.05 ● Outlook ARW2023 | *Andreas Müller (JKU Linz)*
- 16.15 ● Poster Presentations | *Session Chair: Wilfried Kubinger (FH Technikum Wien)*
- 17.30 ● Closing ARW Day 1 | *Lisa-Marie Faller (FH Kärnten, ADMiRE)*
- Networking and "Meeting High Potentials"
- 19.30 ● End of first day

## POSTER SESSION on TUESDAY, JUNE 14

- 16.15 ● 3D-ToF-Vision-Based Detection and Dynamic Workspace Visualization for an ABB GoFa Robot | *D. Schillhammer, C. Ambros, A. Aburaia and M. Aburaia*  
Analysis of the Trends Towards Domain-Crossing Safety Standardization in Close Human-Robot Interaction | *M. Rathmair and M. Hofbauer*  
Collision Avoidance Using Capacitive Proximity Sensors on Series Elastic Robots for Human-Robot Collaboration | *S. Ergun, V. Hande, J. Sturm and H. Zangl*  
Continual Learning Benchmarks for Antipodal Grasping | *S. Auddy, J. Hollenstein, M. Saveriano, A. Rodriguez-Sanchez and J. Piater*  
Continuous Target-Free Extrinsic Calibration of a Multi-Sensor System from a Sequence of Static Viewpoints | *P. Glira, C. Weidinger and J. Weichselbaum*  
Deep Reinforcement Learning for Continuous Robot Trajectory Control | *S. Schwaiger, M. Aburaia, L. Muster, M. Abdank and W. Wöber*  
Development of a Graph-Based Translation from BPMN to Executable Sequences for Industrial Robotic Systems | *C. Zeh, K. Clauss, M. Papa and S. Schlund*  
Gaussian Process Regression for Inverse Kinematics | *L. Muster, M. Aburaia and W. Wöber*  
Sensor Fusion of IMU and GPS for Geofencing on an Industrial Control System for Safe Mowing in Road Areas | *R. Edlinger, S. Dumberger, P. Bauer, M. Zauner and A. Nüchter*  
Software Toolchain for Modelling and Transforming Robotic Workflows into Formally Verifiable Modal Representations | *T. Haspl, M. Rathmair, M. Papa and M. Hofbauer*  
Towards Deep-Learning-Based Local Features for Visual SLAM Algorithms: A Comparison | *S. Dimnik, M. Schörghuber and M. Wallner*  
Towards Self-Awareness in Multi-Robot Systems | *M. Rahmani and B. Rinner*
- 17.30 ● Trajectory Adaptation from Demonstrations with Constrained Optimization | *H. Villeda, J. Piater and M. Saveriano*

## WEDNESDAY, JUNE 15

- 8.00 ● Registration | *Europaplatz 1, 9500 Villach*
- 9.00 ● Keynote 4: Aleš Hribar (Kinestica) | *High-tech Rehabilitation*
- 9.40 ● Offroad Terrain Classification for Mobile Robots | *W. Walch, M. Eder, K. Mautner-Lassnig and G. Steinbauer-Wagner*
- 10.00 ● An Investigation of Accuracy, Repeatability and Reliability of Spot from Boston Dynamics | *R. Fina, H. Gattringer and A. Müller*
- 10.20 ● A Low-Drift LiDAR-based Odometry for Subterranean Area | *V. Rettner, J.-B. Weibel and M. Vincze*
- 10.40 ● Door Pose Estimation and Positioning for Autonomous Door Opening | *R. Edlinger, U. Mitterhuber, R. Froschauer and A. Nüchter*
- 11.00 ● Coffee Break
- 11.20 ● Best Paper Awards | *Justus Piater (UIBK), Gerald Steinbauer-Wagner (TU Graz), Mathias Brandstötter (IEEE Austria Section – RAS), Lisa-Marie Faller (FH Kärnten, ADMiRE)*
- 11.35 ● Closing Ceremony | *Lisa-Marie Faller (FH Kärnten, ADMiRE)*