General Schedule

ROBOTICS
SCIENCE AND SYSTEMS

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00	08:45 Welcome 15 min H 0104				
09:00	09:00 Alyosha Ephros 55 min H 0104	09:00 Rodney Brooks 55 min H 0104	09:00 Julia Parrish 55 min H 0104	09:00 Workshops 1-14 90 min MAR	09:00 Workshops 14-24 90 min MAR
10:00	09:55 Short Talks 35 min H 0104 10:30 Break 30 min Lichthof	09:55 Short Talks 35 min H 0104 10:30 Break 30 min Lichthof	09:55 Short Talks 35 min H 0104 10:30 Break 30 min Lichthof	10:30 Break 30 min MAR	10:30 Break 30 min MAR
11:00	11:00 Talks 1 long + 5 short 60 min H 0104	11:00 Talks 1 long + 5 short 60 min H 0104	11:00 Talks 1 long + 5 short 60 min H 0104	11:00 Workshops 1-14 90 min MAR	11:00 Workshops 14-24 90 min MAR
12:00	12:00 Lunch Break 90 min	12:00 Lunch Break 90 min	12:00 Lunch Break 90 min	12:30 Lunch Break Lab Tour 90 min MAR	12:30 Lunch Break 90 min MAR
13:00	13:30 Raffaello D'Andrea 55 min H 0104 14:25 Short Talks 35 min H 0104	13:30 Talks 2 long + 6 short 90 min H 0104	13:30 Neil Burgess 55 min H 0104 14:25 Short Talks 35 min H 0104	14:00 Workshops 1-14 90 min MAR	14:00 Workshops 14-24 90 min MAR
14:00	15:00 Break 30 min Lichthof	15:00 Break 30 min Lichthof	15:00 Break 25 min Lichthof	15:30 Break 30 min MAR	15:30 Break 30 min MAR
15:00	15:30 Spotlight 30 min H 0104 16:00 Short Talks 30 min H 0104 16:30 Spotlight 30 min H 0104	15:30 Interactive Presentation 2.5 h Lichthof	15:30 Open Forum 45 min H 0104 16:00 Interactive Presentation 4.5 h Lichthof	16:00 Workshops 1-14 90 min MAR	16:00 Workshops 14-24 90 min MAR
16:00	17:00 Opening Interactive Presentation Interactive Food at 19:00 5 h Lichthof		18:00 Closing 30 min H 0104 Interactive Presentation cont'd Interactive Food at 18:30 4.5 h Lichthof		
17:00		20:00 Banquet 2 h at Kater Holzig			
18:00					
19:00					
20:00					
21:00					

Monday, June 24

ROBOTICS
SCIENCE AND SYSTEMS

Start	Length			Interactive session ID
08:45	15	Welcome		
09:00	45+10	Invited Talk: Her Majesty the Data	Alyosha Ephros	
09:55	5	p01: Multi-Hypothesis Social Grouping and Tracking for Mobile Robots	Matthias Luber, Kai Arras	01
	5	p02: Audio based Relative Positioning System for a Swarm of Micro Air Vehicles	Meysam Basiri, et al.	02
	5	p03: High Altitude Stereo Visual Odometry	Michael Warren, Ben Upcroft	03
	5	p04: Learning Semantic Maps from Natural Language Descriptions	Matt Walter, et al.	04
	5	p05: Toward Interactive Grounded Language Acquisition	Thomas Kollar, et al.	05
10:30	30	Coffee Break		
11:00	20+5	p06: Anticipating Human Activities using Object Affordances for Reactive Robotic Response	Hema Koppula, Ashutosh Saxena	06
11:25	5	p07: Online Coverage by a Tethered Autonomous Mobile Robot in Planar Unknown Environments	Iddo Shnaps, Elon Rimon	07
	5	p08: Quantitative Evaluation of Standing Stabilization Using Stiff and Compliant Actuators	Jorhabib Eljaik, et al.	08
	5	p09: Metastability for High-Dimensional Walking Systems on Stochastically Rough Terrain	Mehdi Benallegue, Jean-Paul Laumond	09
	5	p10: An Exact Decentralized Cooperative Navigation Algorithm for Acoustically Networked Underwater Vehicles with Robustness to Faulty Communication: Theory and Experiment	Jeffrey Walls, Ryan Eustice	10
	5	p11: Dynamics, Control and Planning for Cooperative Manipulation of Payloads Suspended by Cables from Multiple Quadrotor Robots	Koushil Sreenath, Vijay Kumar	11
12:00	90	Lunch Break		
13:30	45+10	Invited Talk: Actuated Wingsuits for Unconstrained Human Flight	Raffaello D'Andrea	
14:25	5	p12: Deep Learning for Detecting Robotic Grasps	Ian Lenz, Honglak Lee, Ashutosh Saxena	12
	5	p13: Receding Horizon Control in Dynamic Environments from Temporal Logic Specifications	Alphan Ulusoy, Michael Marrazzo, Calin Belta	13
	5	p14: On Provably Safe Obstacle Avoidance for Autonomous Robotic Ground Vehicles	Stefan Mitsch, Khalil Ghorbal, Andre Platzer	14
	5	p15: Pregrasp Manipulation as Trajectory Optimization	Jennifer King, et al.	15
	5	p16: The Influence of Motion Path and Assembly Sequence on Stability of Assemblies	Sourav Rakshit, Srinivas Akella	16
15:00	30	Coffee Break		
15:30	30	Early Career Spotlight: The Mathematics of Human Robot Interaction	Siddhartha Srinivasa	
16:00	5	p17: Minimum Constraint Displacement Motion Planning	Kris Hauser	17
	5	p18: Integrated Perception and Planning in the Continuous Space: A POMDP Approach	Haoyu Bai, Hsu David, Wee Sun Lee	18
	5	p19: Active Bayesian Perception for Simultaneous Object Localization and Identification	Nathan Lepora, Uriel Martinez-Hernandez, Tony Prescott	19
	5	p20: Gaussian Process-Based Decentralized Data Fusion and Active Sensing for Mobility-on-Demand System	Jie Chen, Kian Hsiang Low and Colin Keng-Yan Tan	20
16:30	30	Early Career Spotlight: High-Level Verifiable Robotics	Hadas Kress-Gazit	
17:00	5 h	Opening Session and Interactive Presentation of today's talks	at Lichthof	
19:00		Interactive Food	at Lichthof	
22:00		End of session		

Tuesday, June 25

ROBOTICS
SCIENCE AND SYSTEMS

Start	Length			Interactive session ID
09:00	45+10	Invited Talk: Robotics Research Just Got A Whole Lot More Exciting	Rodney Brooks	
09:55	5	p21: Exploiting Urban Scenes for Vision-aided Inertial Navigation	Dimitrios Kottas, Stergios Roumeliotis	01
	5	p22: Fast Interpolation and Time-Optimization on Implicit Contact Submanifolds	Kris Hauser	02
	5	p23: Sorry Dave, I'm Afraid I Can't Do That: Explaining Unachievable Robot Tasks Using Natural Language	Vasumathi Raman, et al.	03
	5	p24: Generating Legible Motion	Anca Dragan, Siddhartha Srinivasa	04
	5	p25: Bayesian Fusion for Multi-Modal Aerial Images	Alistair Reid, Fabio Ramos	05
10:30	30	Coffee Break		
11:00	20+5	p26: Modeling and Evaluating Narrative Gestures for Humanlike Robots	Chien-Ming Huang, Bilge Mutlu	06
11:25	5	p27: Unsupervised intrinsic calibration of depth sensors via SLAM	Alex Teichman, Stephen Miller, Sebastian Thrun	07
	5	p28: 6-D manipulation with aerial towed-cable systems	Montserra Manubens, Didier Devaurs, Lluis Ros, Juan Cortés	08
	5	p29: Automatic Online Calibration of Cameras and Lasers	Jesse Levinson, Sebastian Thrun	09
	5	p30: Goal Assignment and Trajectory Planning for Large Teams of Aerial Robots	Matthew Turpin, et al.	10
	5	p31: Finding Locally Optimal, Collision-Free Trajectories with Sequential Convex Optimization	John Schulman, et al.	11
12:00	90	Lunch Break		
12:00	90	Robotics in H2020 – latest development: the Robotics Public-Private Partnership and beyond	Room H1036 (next to Lichthof)	
13:30	20+5	p32: Vision-Based State Estimation and Trajectory Control Towards Aggressive Flight with a Quadrotor	Shaojie Shen, et al.	12
13:55	20+5	p33: Optimal Market-based Multi-Robot Task Allocation via Strategic Pricing	Lantao Liu, Dylan Shell	13
14:20	5	p34: Infinite Latent Conditional Random Fields for Modeling Environments through Humans	Yun Jiang, Ashutosh Saxena	14
	5	p35: Real-Time Camera Tracking and 3D Reconstruction Using Signed Distance Functions	Erik Bylow, et al.	15
	5	p36: Grasp Moduli Spaces	Florian T. Pokorny, Kaiyu Hang, Danica Kragic	16
	5	p37: Keyframe-Based Visual-Inertial SLAM using Nonlinear Optimization	Stefan Leutenegger, et al.	17
	5	p38: Maximum Mean Discrepancy Imitation Learning	Beomjoon Kim, Joelle Pineau	18
	5	p39: Perceiving, Learning, and Exploiting Object Affordances for Autonomous Pile Manipulation	Dov Katz, et al.	19
15:00	30	Coffee Break		
15:30	2.5 h	Interactive Presentation of today's talks, light snacks and beverages	at Lichthof	
18:00		End of session		
20:00		Banquet	at Kater Holzig	

Errata:

Talks of Julia Parrish and Rodney Brooks are swapped in the PDF booklet on the USB stick.

Wednesday, June 26

ROBOTICS
SCIENCE AND SYSTEMS

Start	Length			Interactive session ID
09:00	45+10	Invited Talk: Life Lessons: Are Animal Aggregations Appropriate Models for Robotics?	Julia Parrish	
09:55	5	p40: Correct Software Synthesis for Stable Speed-Controlled Robotic Walking	Neil Dantam, et al.	01
	5	p41: Toward a Platform of Human-Like Fingertip Model in Haptic Environment for Studying Sliding Tactile Mechanism	Anh-Van Ho, Shinichi Hirai	02
	5	p42: Incremental Block Cholesky Factorization for Nonlinear Least Squares in Robotics	Lukas Polok	03
	5	p43: Convex Optimization of Nonlinear Feedback Controllers via Occupation Measures	Anirudha Majumdar, et al.	04
	5	p44: Realtime Registration-Based Tracking via Approximate Nearest Neighbour Search	Travis Dick, et al.	05
10:30	30	Coffee Break		
11:00	20+5	p45: A control framework for tactile servoing	Qiang Li, et al.	06
11:25	5	p46: Topological Approach to Using Cables to Separate and Manipulate Sets of Objects	Soonkyum Kim, et al.	07
	5	p47: Learning to Plan for Constrained Manipulation from Demonstrations	Phillips Mike, et al.	08
	5	p48: Incremental Semantically Grounded Learning from Demonstration	Scott Niekum, et al.	09
	5	p49: Fast Scheduling of Multi-Robot Teams with Temporospatial Constraints	Matthew Gombolay, Ronald Wilcox, Julie Shah	10
	5	p50: Adaptive Estimation of Measurement Bias in Three-Dimensional Field Sensors with Angular Rate Sensors: Theory and Comparative Experimental Evaluation	Giancarlo Troni, Louis Whitcomb	11
12:00	90	Lunch Break		
13:30	45+10	Invited Talk: Neural Mechanisms of Spatial Navigation	Neil Burgess	
14:25	5	p51: Stochastic Motion Planning for Robotic Information Gathering	Geoffrey Hollinger, Gaurav Sukhatme	12
	5	p52: Kinodynamic Planning in the Configuration Space via Velocity Interval Propagation	Quang-Cuong Pham, Yoshihiko Nakamura	13
	5	p53: Approximate Representations for Multi-Robot Control Policies that Maximize Mutual Information	Benjamin Charrow, Vijay Kumar, Nathan Michael	14
	5	p54: Real-Time EMG driven Lower Limb Actuated Orthosis for Assistance As Needed Movement Strategy	Walid Hassani, Samer Mohammed, Yacine Amirat	15
	5	p55: A model of distributional handing interaction for a mobile robot	Chao Shi, et al.	16
15:00	30	Coffee Break		
15:30	45	Open Forum		
16:15	4.5 h	Interactive Presentation of today's talks	at Lichthof	
18:00	30	Best Paper Award and Closing Session	at H 0104	
18:30		Interactive Food	at Lichthof	
21:00		end of main conference		

Errata:

Talks of Julia Parrish and Rodney Brooks are swapped in the PDF booklet on the USB stick.

Thursday, June 27: Workshops 1-14

ROBOTICS
SCIENCE AND SYSTEMS

ID	Room	Title	Chair	Notes
01	4.063	Aerial Mobile Manipulation	R. Voyles	half day/morning
02	0.003	Sensitive Robotics	E. Torres-Jara	half day/morning
03	0.010	Workshop on Common Platforms in Robotic Manipulation	L. Odhner	
04	0.015	4th Workshop on Formal Methods for Robotics and Automation	H. Kress-Gazit	
05	0.016	Inverse Optimal Control & Robot Learning from Demonstration	B. Ziebart	
06	0.007	Robotics Challenges and Vision Workshop	H. Chitsaz	
07	0.002	4th Workshop on RGB-D: Advanced Reasoning with Depth Cameras	A. Saxena	
08	0.001	2nd Workshop on Robots in Clutter: Preparing robots for the real world	M. Zillich	
09	0.011	Active learning in robotics: Exploration, Curiosity, and Interaction	M. Lopes	
10	0.017	From Experience to Concepts and Back	T. Asfour	
11	0.008	Combined Robot Motion Planning and AI Planning for Practical Applications	E. Plaku	
12	4.065	Proposals for experimental protocols for Robotics Research	F. Bonsignorio	half day/afternoon
13	0.009	Robot Design and Control: Advanced Robot Motion	S. Singh	half day/afternoon
14	4.064	Robotic Exploration, Monitoring, and Information Collection: Nonparametric Modeling, Information-based Control, and Planning under Uncertainty	G. Hollinger and S. Karaman	two day
	5.065	Lab Tour: Robotics and Biology Lab, TU Berlin		12:30-13:30

Friday, June 28: Workshops 14-24

ROBOTICS
SCIENCE AND SYSTEMS

ID	Room	Title	Chair	Notes
14	4.064	Robotic Exploration, Monitoring, and Information Collection: Nonparametric Modeling, Information-based Control, and Planning under Uncertainty	G. Hollinger and S. Karaman	two day
15	4.063	Workshop on Multi-View Geometry in Robotics	V. Indelman	half day / morning
16	0.001	Resource-Efficient Integration of Perception, Control and Navigation for Micro Air Vehicles	M. Suppa	
17	0.002	Hierarchical and Structured Learning for Robotics	G. Neumann	
18	0.007	Programming with constraints: Combining high-level action specification and low-level motion execution	G. Borghesan	
19	0.008	Towards Active Lower Limb Prosthetic Systems: Design Issues and Solutions	P. Beckerle	
20	0.010	Robotics for Environmental Monitoring	R. Smith	half day / morning
21	0.011	Manipulation with Uncertain Models	D. Katz	
22	0.016	Human Robot Collaboration	J. Boerkoel	
23	0.017	What did we learn from the simulation phase of the DARPA Robotics Challenge	E. Todorov	
24	4.065	Scientific and Structural Achievements from Academia-Industry Projects in ECHORD	F. Röhrbein	half day / afternoon