

PROGRAM DRAFT 13.11.15

Sunday, March 13th - University of Sydney				
	2:00pm - 5:00pm	<b>PRE-WORKSHOP</b> <i>Grasshopper Introductory Course</i>		
Monday, March 14th - Pier 2 & 3				
	10:00am-5:00pm	<b>INDUSTRY WORKSHOP</b> <i>KUKA PRC, ABB, KUKA LBR iiwa &amp; Delcam</i>		
Tuesday, March 15th - Pier 2 & 3				
	10:00am-5:00pm	<b>WORKSHOPS</b>		
	6:00pm - 10:00pm	<i>Suggested Meeting Point: Opera Bar</i>		
Wednesday, March 16th Pier 2 & 3				
	10:00am – 05:00pm	<b>WORKSHOPS</b>		
	6:00pm - 10:00pm	<i>Suggested Meeting Point: Hugos in Manly</i>		
Thursday, March 17th Pier 2 & 3				
	010:00am – 05:00pm	<b>WORKSHOPS</b>		
	6:00pm - 10:00pm	<i>USYD BBQ / Suggested activity Robot performance at Robot Performance as additional program component for RobArch2016</i>		
Friday, March 18th Pier 2 & 3				
30min	08:30am – 09:00 am	<b>REGISTRATION / COFFEE</b>		
15min	09:00 - 9:15 am	<b>WELCOME DAY 1 FROM CHAIRS</b> Dagmar Reinhardt, Rob Saunders, Jane Burry and Marjo Niemelä	<i>University of Sydney and RMIT</i>	
40min total, 30min pres, 5 min intro, 5 min questions	09:15 - 9:55 am	<b>KEYNOTE</b> Mark Burry	<i>University of Melbourne</i>	Robots at the Sagrada Familia Basilica
90min total, 25min each, 5 min intros, 10 min questions	9:55- 11:25am	<b>FULL PAPERS</b>		
		Michael Jeffers	<i>Carnegie Mellon University</i>	Autonomous Robotic Assembly with Variable Material Properties
		Paul Nicholas, David Stasiuk, Esben Nørgaard, Christopher Hutchinson and Mette Ramsgaard Thomsen	<i>Royal Danish Academy of Fine Arts, Monash University and Royal Danish Academy of Fine Arts</i>	An Integrated Modelling and Toolpathing Approach for a Frameless Stressed Skin Structure
		Ammar Mirjan, Federico Augugliaro, Raffaello D'Andrea, Fabio Gramazio and Matthias Kohler	<i>ETH Zürich</i>	Building a Bridge with Flying Robots
20min	11:25-11:45	<b>COFFEE</b>		
90 min total, 15min each, 5 min intro, 10 min questions	11:45 pm –1:15pm	<b>SESSION 2: PROJECT PAPERS</b>		
		Xun Li, DongHan Shin, JinHo Park and HyungUk Ahn	<i>Inha University and B.A.T architecture</i>	Robotics-Based Prefabrication in Architecture : Prefabrication the Shinsa-town Free-Form Ceiling Structures
		Nicholas Williams and John Cherrey	<i>RMIT University</i>	Crafting Robustness: Rapidly Fabricating Ruled Surface Acoustic Panels
		Simon Weir, Dion Moulnt and Shayani Fernando	<i>University of Sydney</i>	Stereotomy of Wave Jointed Blocks : Toward a Wave-Jointed Stone Construction using Wire Cutter Toolpath Generation
		Christopher Robeller and Yves Weinand.	<i>EPFL Lausanne</i>	Fabrication-Aware Design of Timber Folded Plate Shells with Double-Through Tenon Joi
		Alexander Jung, Dagmar Reinhardt and Rod Watt	<i>University of Sydney</i>	RBDM_Robodome: Complex Curved Geometries with Robotically Fabricated Joints
45min	01:15pm – 02:00pm	<b>LUNCH</b>	<i>Lunch provided &amp; Cafes close vicinity</i>	
30min	02:00pm – 02:30pm	<b>INDUSTRY KEYNOTE</b>		
		Frank-Peter Kirgis, Peter Katsos and Martin Kohlmaier (intro RIA)	<i>ABB Switzerland</i>	Collaborative Robotics
90min total, 25min each, 5 min intros, 10 min question	2:30 pm – 4:00pm	<b>SESSION 3: FULL PAPERS</b>		
		Andrew Saunders and Greg Epps	<i>University of Pennsylvania and RoboFold</i>	Robotic Lattice Smock: A Method for Transposing Pliable Textile Smocking Techniques through Robotic Curved Folding and Bending of Sheet Metal
		Philip F. Yuan, Hao Meng, Lei Yu and Liming Zhang	<i>Tongji University, Archi-Union Architects and Qing Hua University</i>	Robotic Multi-Dimensional Printing Based on Structural Performance
		Ron Culver and Joseph Sarafian	<i>UCLA</i>	Fabric Forms: Robotic Positioning of Fabric Formwork
20min	4:00 pm - 4:20pm	<b>COFFEE BREAK</b>		

75 min total, 15min each, 5 min intro, 10 min questions	4:20pm - 5:35pm	<b>SESSION 4: PROJECT PAPERS</b>	
		Marjo Niemelä, Samantha Horlyck, Susana Alarcon-Licona, Dylan Wozniak-O'Connor, Gabriele Ulacco, Rodney Watt and Rob Saunders	University of Sydney BotBar: A Platform for Multi-Disciplinary Design Education
		Roland Snooks and Gwyllim Jahn	RMIT University, Kakkugia, Studio Roland Snooks and Elseware Collective Closeness: On the Relationship of Multi-Agent Algorithms and Robotic Fabrication
		Kaicong Wu and Axel Killian	Princeton University Developing Architectural Geometry through Robotic Assembly and Material Sensing
55min total 20min each + 5 intro + 10min questions	5.35- 6.60	<b>RIA prize winners</b>	
10 min	6.30pm - 6:45pm	<b>Closing Day 1 (Reinhardt)</b>	
	6:45pm - 09:00pm	<b>OPENING OF WORKSHOP EXHIBITION, BOTBAR</b>	
		Food trucks and/or Bar at the End of Wharf	
Saturday, March 19th Pier 2 & 3			
15min	09:00 - 9:15 am	<b>WELCOME DAY 2 FROM CHAIRS</b>	
		Dagmar Reinhardt, Rob Saunders, Jane Burry and Marjo Niemelä	University of Sydney and RMIT
40min total, 30min pres, 5 min intro, 5 min questions	09:15 - 9:55 am	<b>KEYNOTE</b>	
90min total, 25min	9:55 - 11:25am	Francois Roche, Camille Lacadee and Stephan Henrich	Lab M4 (mindmachinemakingmyth) 'Psychaestenia Psycho-case Studies by New Territories/M4
		<b>SESSION 5: FULL PAPERS</b>	
		Gregor Steinhagen, Johannes Braumann, Jan Brüninghaus, Matthias Neuhaus, Sigrid Brell-Cokcan and Bernd Kuhlenkötter	TU Dortmund, Association for Robots in Architecture, University for Arts and Design Linz, RWTH Aachen University, Ruhr-Universität Bochum Path Planning for Robotic Artistic Stone Surface Production
		Dagmar Reinhardt, Densil Cabrera, Alexander Jung and Rod Watt.	The University of Sydney Towards a Micro Design of Acoustic Surfaces
		Asbjørn Søndergaard, Jelle Feringa, Toke Nørbjerg, Kasper Steenstrup, David Brander, Jens Gravesen, Steen Markvorsen, Andreas Bærentzen, Kiril Petkov, Jesper Hattel, Kenn Clausen, Kasper Jensen, Lars Knudsen and Jacob Kortbek	Odico Farmwork Robotics Aps, Technical University of Denmark, GKN A/S, Danish Technological Institute Robotic Hot-Blade Cutting: An Industrial Approach to Cost-Effective Production of Double Curved Concrete Structures
20 min	11:25am - 11:24am	<b>COFFEE BREAK</b>	
30 min	11:45am - 12:15pm	<b>INDUSTRY KEYNOTE</b>	
		Heinrich Munz	KUKA Roboter GmbH A New Approach to Simple Software Integration of Robots in Production Machinery, Automation Systems, and New Parametric Environments
75 min total,	12:15 pm - 1:30pm	<b>SESSION 6: PROJECT PAPERS</b>	
		Kathrin Doerfler, Timothy Sandy, Markus Gifftthaler, Fabio Gramazio, Matthias Kohler and Jonas Buchli	ETH Zürich Mobile Robotic Brickwork : Automation of a Discrete Robotic Fabrication Process Using an Autonomous Mobile Robot
		Jose Pedro Sousa, Cristina Gassó Palop, Eduardo Moreira, Andry Maykol Pinto, José Lima, Paulo Costa, Pedro Costa, Germano Veiga and A. Paulo Moreira	University of Porto, CEAU/DF, INESC TEC, Polytechnic Institute of Bragança, The SPIDERobot: A Cable-Robot System for On-Site Construction in Architecture
		Joshua Bard, Richard Tursky and Michael Jeffers	Carnegie Mellon University RECONstruction: A Survey of Surface Scanning Techniques for Architectural Substrates in Robotic Assembly
		Nathan King, Nathan Melenbrink, Nick Cote and Gustav Fagerström	Virginia Tech, The United Nathans and Autodesk BUILD-ing the MASS Lo-Fab Pavilion : Dynamo-Driven Collaborative Robotic Fabrication Workflows for the Construction of Spatial Structures
45 min	1:30pm - 2:15 pm	<b>LUNCH</b>	
30 min	2:15pm - 2:45pm	<b>INDUSTRY KEYNOTE</b>	
		Matt Jezyk and Charles Jones	Autodesk, Delcam Design Computation, Optimization and Fabrication
90 min total, 15min each, 5 min intro, 10 min questions	2:45pm - 4:15pm	<b>SESSION 7: PROJECT PAPERS</b>	
		Felix Amtsberg, Gernot Parmann, Andreas Trummer and Stefan Peters	Graz University of Technology From Analysis to Production and Back : Attempts and Results of Reusable Adaptive Freeform Production Strategies for Double Curved Concrete Construction Elements
		Kate Dunn, Dylan Wozniak O'Connor, Marjo Niemelä and Gabriele Ulacco	University of NSW, The University of Sydney and AR-MA Free Form Clay Deposition in Custom Generated Molds
		Brian Peters	Kent State University and Design Lab Workshop Solar Bytes Pavilion: 3D Printed Interlocking Modules
		Sina Mostafavi and Henriette Bier	TU Delft Materially Informed Design to Robotic Production : A Robotic 3D Printing System for Informed Material Deposition
		Kam-Ming Mark Tam, James R. Coleman, Nicholas W.	

20 min	4:15pm - 4:35pm	<b>COFFEE BREAK</b>	
105 min total, 15min each, 5 min intro, 10 min questions	4:35pm - 6:20pm	<b>SESSION 8: WORKSHOP PAPERS</b>	
		Curime Batliner, Michael Jake Newsum and M. Casey Rehm	<i>Southern California Institute of Architecture (SCI-Arc)</i> Robot UI: User Interfaces for Robotic Live Control
		Thibault Schwartz, Sebastian Andraos, Jonathan Nelson, Chris Knapp and Bertrand Arnold	<i>HAL Robotics, Bond University and Soundisplay</i> Towards On-site Collaborative Robotics: Voice Control, Co-Speech Gesture & Context-Specific Object Recognition via Ad-Hoc Communication
		Roland Snooks and Gwylim Jahn	<i>RMIT University, Kokkugia, Studio Roland Snooks and Elseware Collective</i> Stigmergic Accretion
		Alex Dubor, Gabriel Bello Diaz, Guillem Camprodon, Dagmar Reinhardt, Kate Dunn, Rob Saunders, Dylan Wozniak O'Connor, Marjo Niemelä, Susana Alarcon Licona and Samantha Horlyck	<i>Institute for Advanced Architecture of Catalonia (IAAC), Make It Locally, The University of Sydney and University of NSW</i> Sensors and Workflow Evolutions: Developing A Framework for Instant Robotic Toolpath Revision
		Dave Pigram, Iain Maxwell and Wes McGee	<i>University of Technology Sydney and University of Michigan</i> Towards Real-Time Adaptive Fabrication-Aware Form Finding in Architecture
		Tim Schork/ ICD	<i>Monash University</i> Robotic Sewing of Custom Timber Modules
15min total	6:20pm - 6:35 pm	<b>CONFERENCE CLOSING WORDS</b>	
		Dagmar Reinhardt, Rob Saunders, Marjo Niemelä and Jane Burry	<i>University of Sydney and RMIT</i>
	7:00pm	<b>CONFERENCE CLOSING DINNER, HARBOUR CRUISE &amp; AWARD CEREMONY</b>	
		KUKA Young Potential Award	<i>KUKA Robot Group</i>
		Awards Presentation Sigrid Brell-Cokcan and Johannes Braumann	<i>Association for Robots in Architecture</i>