

CANCOM 2017

10th Canadian-International Conference on Composites
17-20 July 2017, Ottawa, Ontario, Canada

Main Topics:

- Aerospace
- Automotive
- Armour
- Civil structures
- Nanocomposites
- High temperature composites
- Textile composites
- Sandwich structures
- Design and analysis
- Fatigue and fracture
- Manufacturing and processing
- Joining
- Repair
- Certification
- Impact response
- Durability



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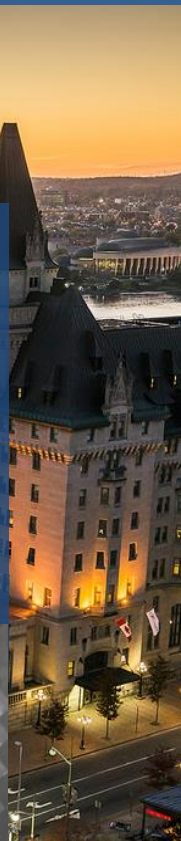
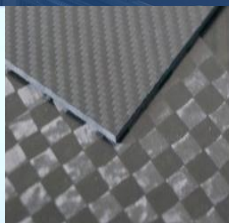
We look forward to seeing you on Canada's 150th anniversary!

CANCOM 2017

10^{ème} Conférence Canadienne-Internationale sur les Composites
17-20 Juillet 2017, Ottawa, Ontario, Canada

Principaux sujets :

- Aérospatiale
- Véhicules automobiles
- Blindage et défense
- Infrastructure civile
- Nano-composites
- Composites hautes températures
- Composites textiles
- Structures sandwich
- Design et analyse
- Fatigue et rupture
- Procédés et fabrication
- Joints et assemblages
- Réparation
- Certification
- Réponse sous impact
- Durabilité



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Au plaisir de vous rencontrer lors du 150^{ème} du Canada!

CANCOM2017 Program

17 - 20 July 2017, Ottawa, Ontario, Canada

"Advanced Composites in Addressing Global Challenges of the 21st Century"

Desmarais Building, University of Ottawa, 55 Laurier Avenue East

Monday, July 17	Tuesday, July 18			Wednesday, July 19			Thursday, July 20		
	Breakfast - 7:00-8:15								
	Keynote 1 - Larry Ilcewicz and Cindy Ashforth (FAA) 8:15-9:00			Keynote 2 - David Polland, Allen Fawcett, Kevin Davis (Boeing) 8:15-9:00			Keynote 5 - Chantal Fualdes (Airbus) 8:15-9:00		
FAA Tutorial on Composites Certification, Cindy Ashforth (FAA) 8:30-10:00	Oral Sessions - 9:10-10:30			Oral Sessions & Student Competition 9:10-10:30			Oral Sessions - 9:10-10:30		
	Thermoplastics	Infusion Processes 1	Vibrations & Dynamic Response	Natural Fibres	Composites in Space & SHM	Student Competition	Innovative Nanomaterials	Damage Evolution	Armour & Protection
Coffee Break - 10:30-10:45									
FAA Tutorial (continued) 10:15-12:00	Oral Sessions - 10:45-12:05			Oral Sessions - 10:45-12:05			Oral Sessions - 10:45-12:05		
	Forming	Infusion Processes 2	Joints & Repairs	Composites in Infrastructure	Emerging NDI & Sensing tech	Student Competition	Novel Hybrid Materials	Braided/Pultruded & Sandwich	Impact
Lunch Break - 12:05-13:30									
Hands-on Repair Tutorial (Reserved seats only) 13:00-15:00	Oral Sessions - 13:30-14:50			Keynote 3 - Jean-Philippe Marouzé (Bombardier) 13:30-14:15			Oral Sessions -13:30-14:50		
	Textiles & 3D Composites	Welding & Fusion	Performance Modelling	Workshop 2: Real-World Challenges in Composite Transport Program Definition, Certification and Production Readiness (led by Airbus, Boeing, Bombardier) 14:15-15:00			Reinforcement & Mechanical Performance	Damage in Sandwich Panels	Failure Onset & Progression
Coffee Break									
Hands on Repair Tutorial (Reserved seats only) 15:15-17:30	Oral Sessions - 15:05-16:05			Keynote 4 - Prof. A. Poursartip (CRN, CMT, UBC) 15:15-16:00					
	Fibre & Yarn Placement	Delamination & ILSS	Buckling & Wrinkling	Workshop 3: Barriers to Knowledge Transfer Within the Composite Applications Community (led by Convergent Manufacturing Tech., NSE Composites, Spirit, WSU, UBC, NRC) 16:00-16:30					
	Workshop 1: Towards A Composites National Network in Canada (All welcome) 16:15-18:15			Workshop 4: Composite Repair Technology Transfer from OEM and Regulators to Users (led by FAA, Airbus, Boeing, Bombardier) 16:30-17:00					
	Reception @ Desmarais Building 18:30-20:30			Banquet @ Museum of History 18:00-21:30					

		Monday, July 17th			
8	:00		:00	8	
	:15		:15		
	:30	FAA Tutorial on Composites Certification, Cindy Ashforth (FAA) 8:30-10:00 (room 1160)	:30		
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10	:00	Coffee Break 10:00-10:15	:00	10	
	:15	FAA Tutorial (continued) 10:15-12:00 (room 1160)	:15		
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11	:00		:00	11	
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12	:00	Lunch Break 12:00-13:00	:00	12	
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13	:00	Hands-on Repair Tutorial (Reserved seats only) 13:00-15:00 (Room CBY C011)	:00	13	
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15	:00	Coffee Break 15:00-15:15	:00	15	
	:15	Hands-on Repair Tutorial (Reserved seats only) 15:15-17:30 (Room CBY C011)	:15		
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Thursday, July 20th, Morning

7	:00	Breakfast 7:00-8:15			:00	7
8	:15	Keynote 5 - "A350XWB From Certification to Industrial Phase, What Matters?", Chantal Fualdes (Airbus Industries) 8:15-9:00 (room 1160)			:15	8
9	:10	Oral Sessions - 9:10-10:30			:10	9
		Innovative Nanomaterials (room 1110)	Damage Evolution (room 1120)	Armour & Protection (room 1160)		
		<i>PRODUCTION OF POLYURETHANE/NANOTUBE COMPOSITES WITH TAILORABLE PROPERTIES AND FUNCTIONALITIES</i> Y. Martinez-Rubi, B. Ashrafi, M.J Jakubinek, S. Zou, C. Homenick, K. Laqua, M. Barnes, K. Kim, C. Kingston and B. Simard National Research Council Canada	<i>MESOSCALE MODELLING OF COMPRESSIVE RESPONSE AND DAMAGE EVOLUTION IN FLAX FIBRE REINFORCED LAMINATES</i> C. Nicolinco, Z. Mahboob, Y. Chemisky and H. Bougherara Ryerson University and Arts et Métiers ParisTech Metz	<i>COMPRESSIVE AND BENDING STRENGTH OF UHMWPE LAMINATES</i> Y. Zhang, R. Desnoyers, A. Johnston and Q. Yang National Research Council Canada		
	:30	<i>PREPREG-LIKE, HIGH-NANOTUBE-CONTENT COMPOSITES FROM EPOXY-INFILTRATED BORON NITRIDE NANOTUBE BUCKYPAPERS</i> M. Jakubinek, B. Ashrafi, Y. Martinez-Rubi, K. Laqua, D. Park, M. Oceau and B. Simard National Research Council Canada	<i>STRESS FIELD MODEL FOR IMPACT DAMAGE EVALUATION IN COMPOSITES</i> S. Russell Aerospace Structures Engineer	<i>THE CHEMISTRY OF BORON NITRIDE NANOTUBES (BNNTS) AND PC-BNNT COMPOSITES: TOWARDS TRANSPARENT ARMOUR APPLICATIONS</i> J. Guan, S. Derdouri, E. Patenaude, Y. Martinez-Rubi, B. Ashrafi, M. Jakubinek, K. Kim, C. Kingston and B. Simard National Research Council Canada	:30	
	:50	<i>ELECTRICALLY RESPONSIVE POLYURETHANE-CNT SHEETS FOR SENSING AND HEATING</i> B. Ashrafi, K. Laqua, Y. Martinez-Rubi, M. Jakubinek, D. Park and B. Simard National Research Council Canada	<i>FATIGUE OF FLAX-EPOXY LAMINATES UNDER CONSTANT STRAIN-AMPLITUDE CYCLING</i> Z. Mahboob, Z. Fawaz and H. Bougherara Ryerson University	<i>COMPOSITES HYBRIDIZATION USING UHMWPE CORE VIA ADHESIVE BONDING FOR BALLISTIC APPLICATIONS</i> S. Noormohammed, D. Boucher, S. Ouellet, S. Labonté and K. Williams National Research Council Canada and DRDC	:50	
10	:10	<i>INFLUENCE OF CARBON NANOTUBES ON STIFFNESS PROPERTIES OF MULTISCALE COMPOSITE BLADES HAVING AIRFOIL-SHAPE CROSS-SECTION</i> M. Rafiee, F. Nitzsche and M. Labrosse University of Ottawa and Carleton University	<i>MECHANICAL PROPERTIES OF CHEMICALLY DEGRADED AEROSPACE FIBRE-REINFORCED POLYMER MATRIX COMPOSITES</i> J. Carette, L. Kincaid, J. Laliberte and M. Faragalli Carleton University and General Dynamics Mission Systems	<i>INTERMEDIATE STRAIN RATE CHARACTERIZATION OF MATERIALS USING A HIGH SPEED SERVO-HYDRAULIC LOAD FRAME</i> A. Naftel and M. Rahmat National Research Council Canada	:10	10
	:30	Coffee Break 10:30-10:45			:30	
	:45	Oral Sessions - 10:45-12:05			:45	
		Novel Hybrid Materials (room 1110)	Braided/Pultruded & Sandwich (room 1120)	Impact (room 1160)		
		<i>METALLIZATION OF CARBON FIBRE REINFORCED COMPOSITES USING GRIP METAL™ AND COLD SPRAY</i> Y. Xu, F. Robitaille and B. Jodoin University of Ottawa	<i>COMPLEX AIRCRAFT FUSELAGE FRAME MANUFACTURING USING AUTOMATED BRAIDING AND INFUSION</i> P. Monnot, J. Levesque, R. Dubé and L. Laberge Lebel École Polytechnique Montréal, Groupe CTT and CTA	<i>A PRACTICAL ANALYTICAL MODEL FOR PREDICTING RESPONSE OF 3D FIBERGLASS FABRIC SUBJECTED TO IMPACT LOADING</i> Z. Asaee and F. Taheri Dalhousie University		
11	:05	<i>UNDERSTANDING THE PARAMETERS THAT INFLUENCE BUCKLING OF 3D FIBER-METAL LAMINATES</i> D. De Cicco and F. Taheri Dalhousie University	<i>MECHANICAL PERFORMANCE OF REPAIRED SANDWICH PANELS: EXPERIMENTAL AND NUMERICAL INVESTIGATIONS</i> E. Ghazali, M. Dano and A. Gakwaya Université Laval	<i>LOW VELOCITY IMPACT ASSESSMENT OF KEVLAR/FLAX-EPOXY COMPOSITE USING IR THERMOGRAPHY</i> B. Sy, H. Bougherara, Z. Fawaz and A. Sarwar Ryerson University	:05	11
	:25	<i>IMPACT FATIGUE PERFORMANCE OF ADHESIVE BONDED STRUCTURES BASED ON GRIP METAL™ CONCEPT</i> A. Fawcett, C. Li, X. Huang and N. Samardzic Carleton University and National Research Council Canada	<i>FIBER-LEVEL BI-AXIAL BRAID SIMULATION FOR BRAID-TRUSION</i> M. Ghaedsharaf, J. Brunel and L. Laberge Lebel École Polytechnique Montréal and Bombardier Product Development Engineering	<i>MECHANICAL CHARACTERIZATION OF PARTICLE-INFUSED ELASTOMERIC SYSTEMS</i> C. Comtois-Arnaldo and O. Petel Carleton University	:25	
	:45	<i>A PRELIMINARY INVESTIGATION OF FIBER-METAL-LAMINATES WITH GRIP METAL™</i> M. Miller, R. Greiss, V. Nguyen, K. Slew, C. Li, X. Huang, M. El-Sayed and E. Matida Carleton University and National Research Council Canada	<i>SIMPLIFIED FAILURE MODE MAPS FOR SANDWICH BEAMS</i> A. Mondal and S. Nakhla Memorial University of Newfoundland	<i>SPALL STRENGTH MEASUREMENTS OF EPOXY POLYMERS</i> J. Pepper, J. Huneault, O. Petel and M. Rahmat Carleton University and National Research Council Canada	:45	
12	:05	Lunch Break 12:05-13:30			:05	12

		Tuesday, July 18th, Afternoon				
12	:05	Lunch Break 12:05-13:30			:05	12
13	:30	Oral Sessions - 13:30-14:50			:30	13
		Textiles & 3D Composites (room 1110)	Welding & Fusion (room 1120)	Performance Modelling (room 1160)		
		<i>ANALSING INTERLACING PATTERNS IN 3D CARBON FIBRE REINFORCEMENTS</i> R. Salekrostam, D. Muzar and F. Robitaille University of Ottawa	<i>INNOVATIVE WELDING OF CF/EPOXY AND CF/PEEK COMPOSITES</i> R. van Moorlegheem and I. Villegas TuDelft	<i>EFFECTS OF HYBRIDIZATION OF LAMINATES WITH RANDOMLY ORIENTED STRANDS AT COUPON AND PART LEVELS</i> S. Visweswaraiiah, L. Lessard, P. Hubert and P. Beaulieu McGill University and Bell Helicopter		
	:50	<i>FAST DESIGN AND MANUFACTURING OF MULTILAYER GLASS AND CARBON TEXTILE PREFORMS FOR LCM</i> S. Gagné, C. Rannou, M. Levesque, B. Payette and F. Robitaille University of Ottawa and Hutchinson Montreal	<i>EMERGING TECHNOLOGIES IN COMPOSITE PROCESSING</i> T. Rose AvPro Technology Inc	<i>SIMULATION OF OPEN-HOLE TENSION TESTS ON COMPOSITE LAMINATES USING A COMBINED DISCRETE AND CONTINUUM DAMAGE APPROACH</i> M. Shahbazi, N. Zobeiry and R. Vaziri University of British Columbia	:50	
14	:10	<i>A HYBRID KINEMATIC-BASED MODEL (HYKE-I) FOR PREDICTING FORMING-INDUCED DEFECTS OF WOVEN COMPOSITES</i> A. Rashidi and A. Milani University of British Columbia	<i>NANOCOMPOSITE HEATING ELEMENTS FOR INDUCTION WELDING OF THERMOPLASTIC COMPOSITES</i> R. Farahani, R. Seiller and M. Dubé École de Technologie Supérieure	<i>PARAMETRIC INSTABILITY OF CROSS-PLY LAMINATED COMPOSITE CYLINDRICAL SHELLS BASED ON LARGE DEFLECTIONS THEORY</i> M. Darabi and R. Ganesan Concordia University	:10	14
	:30	<i>RECOVERY OF 3D ANISOTROPY DATA FROM CT SCANS OF 3D WOVEN COMPOSITES BY PRINCIPAL COMPONENT ANALYSIS</i> P. Gadoury, I. Gitman, A. Smith and R. Scaife University of Sheffield	<i>REVIEW OF FINITE ELEMENT APPROACHES FOR CREEP MODELING OF FLEXIBLE COMPOSITE PIPING SYSTEMS</i> H. Ashrafizadeh and P. Mertiny University of Alberta	<i>VARIATIONAL ITERATION METHOD FOR SANDWICH PANEL STABILITY</i> P. Yu and S. Nakhla Memorial University of Newfoundland	:30	
	:50	Coffee Break 14:50-15:05			:50	
15	:05	Oral Sessions - 15:05-16:05			:05	15
		Fibre & Yarn Placement (room 1110)	Delamination & ILSS (room 1120)	Buckling & Wrinkling (room 1160)		
		<i>EFFECT OF PROCESS PARAMETERS ON MECHANICAL PROPERTIES OF THERMOPLASTIC COMPOSITE RINGS MANUFACTURED BY LASER-ASSISTED FIBER PLACEMENT</i> M. Eimanlou and M. Hojjati Concordia University	<i>INTERLAMINAR FRACTURE IN TUFTED COMPOSITES: EFFECTS OF TUFT GEOMETRY AND SURFACE DENSITY</i> S. Joncas, G. Pappas, J. Botsis and V. Michaud École de Technologie Supérieure, and École Polytechnique Fédérale de Lausanne	<i>BUCKLING OF ROTATIONALLY RESTRAINED LAMINATED COMPOSITE FLAT PANELS UNDER MULTIAXIAL LOADINGS</i> N. Shabanijafroudi, S. Jazouli, J. Marouzé and R. Ganesan Concordia University and Bombardier Aerospace		
	:25	<i>STEERED YARN INTERLACED, THICK & NEAR NET-SHAPE CARBON FIBRE PREFORMS</i> T. Drivas, I. West, N. Burnford, R. Salekrostam and F. Robitaille University of Ottawa	<i>THE EFFECT OF WEAVE STACKING ON MODE I FRACTURE TOUGHNESS OF COMPOSITES</i> S. Baril-Gosselin and C. Li National Research Council Canada	<i>FINITE ELEMENT ANALYSIS OF SANDWICH PANEL FACESHEET WRINKLING</i> P. Yu and S. Nakhla Memorial University of Newfoundland	:25	
	:45	<i>STRUCTURAL ANALYSIS OF MODERATELY-THICK FIBERSTEERED COMPOSITE CONICAL PANELS</i> H. Sarvestani, A. Akbarzadeh, and M. Hojjati McGill University and Concordia University		<i>DAMAGE DEVELOPMENT ON CFRP STIFFENED PANELS IN POST-BUCKLING REGIME</i> N. Bouslama, A. Maslouhi and S. Jazouli Université de Sherbrooke and Bombardier Aerospace	:45	
16	:05	Workshop 1: Towards A Composites National Network in Canada (All welcome) 16:15-18:15 (room 4101)			:05	16
18	:30	Reception 18:30-20:30 (room 4101)			:30	18

		Wednesday, July 19th			
7	:00	Breakfast 7:00-8:15			:00 7
8	:15	Keynote 2 - "Boeing 787 Airframe Structure Development", David Polland, Allen Fawcett and Kevin Davis (Boeing Company) 8:15-9:00 (room 1160)			:15 8
9	:10	Oral Sessions - 9:10-10:30			:10 9
		Natural Fibres (room 1110)	Composites in Space & SHM (room 1120)	Student Competition (room 1160)	
		<i>EVALUATING THE POTENTIAL OF BIOCHAR AS REINFORCING FILLER IN GLASS FIBER-REINFORCED POLYMER COMPOSITES</i> L. Bowly, J. Lander, M. Afzal and G. Saha University of New Brunswick	<i>THERMAL CYCLING OF OUT-OF-AUTOCLAVE THERMOSETTING COMPOSITE MATERIALS</i> S. Mahdavi, S. Gupta and M. Hojjati Concordia University	<i>UNDERSTANDING THE ACOUSTIC BEHAVIOUR OF NATURAL FIBER COMPOSITES AND THE EFFECTS OF TEMPERATURE AND HUMIDITY</i> A. Duraisamy and L. Lessard McGill University	
	:30	<i>TAILORING PROPERTIES OF SHAPE MEMORY POLYMERS USING CELLULOSE NANOCRYSTALS</i> I. Garces, S. Aslanzadeh, Y. Boluk and C. Ayranci University of Alberta	<i>NON-DESTRUCTIVE IR INSPECTION OF DRY MULTILAYER CARBON AND GLASS FIBRE PREFORMS</i> J. Ocana and F. Robitaille University of Ottawa	<i>ANALYSIS OF VOID MORPHOLOGY AND DISTRIBUTION IN NATURAL FIBER REINFORCED COMPOSITES</i> A. Madra, V. Dan-Thuy, P. Breitkopf and F. Trochu École Polytechnique de Montréal, Can-Tho University and Université de Technologie de Compiègne	:30
	:50	<i>INVESTIGATION ON THE PROPERTIES OF BROWN EGGSHHELL POWDER FILLED POLY(LACTIC ACID) COMPOSITES</i> N. Betancourt and D. Cree University of Saskatchewan	<i>EXPERIMENTAL ANALYSES FOR THE FLAWS CAUSED BY FIBER INSERTION AND STITCHING IN 3D PREFORMED T-JOINT CARBON FIBER REINFORCED POLYMER COMPOSITES USING X-RAY MICRO-COMPUTED TOMOGRAPHY</i> H. Zhang, F. Robitaille, U. Hassler, S. Joncas and X. Maldague Université Laval and University of Ottawa	<i>OPTIMIZATION OF MACHINING PARAMETERS FOR THE TRIMMING PROCESS OF UNIDIRECTIONAL FLAX FIBER COMPOSITES</i> N. Karabibene, J. Chatelain, Y. Beauchamp and G. Lebrun École de Technologie Supérieure and Université du Québec à Trois-Rivières	:50
	10	:10	<i>EXPERIMENTAL STUDY OF THE PLANAR COMPACTION AND CONFORMATION OF UNIDIRECTIONAL FLAX REINFORCEMENTS USING THIN PAPER OR FLAX MATS AS BINDER FOR THE UD FIBERS</i> R. Mbakop, G. Lebrun and F. Brouillette Université du Québec à Trois-Rivières	<i>POLYMER DERIVED ARCHITECTURED CERAMICS AND CERAMIC MATRIX COMPOSITES</i> M. Mirkhalaf, B. Ashrafi, M. Octeau, R. MacNeil and A. Yousefpour National Research Council Canada	<i>A TWO-PHASE INTEGRATED FLOW-STRESS PROCESS MODEL FOR POLYMERIC COMPOSITE MATERIALS</i> S. Niaki, A. Forghani, R. Vaziri and A. Poursartip University of British Columbia and Convergent Manufacturing Technologies Inc.
	:30	Coffee Break 10:30-10:45			:30
	:45	Oral Sessions - 10:45-12:05			:45
		Composites in Infrastructure (room 1110)	Emerging NDI & Sensing Tech (room 1120)	Student Competition (room 1160)	
		<i>STRESS-STRAIN MODEL FOR GFRP-RC CIRCULAR CONCRETE COLUMNS</i> M. Afifi, H. Mohamed and B. Benmokrane Université de Sherbrooke	<i>STRAIN MEASUREMENT CONSIDERATIONS FOR DISCONTINUOUS CARBON FIBRE REINFORCED COMPOSITE PARTS</i> R. Cole, D. Backman and B. Barnett National Research Council Canada and Pratt & Whitney Canada	<i>MATERIAL CHARACTERIZATION TO EVALUATE THE SUITABILITY OF OUT-OF-AUTOCLAVE SEMIPREGS FOR STRUCTURAL SPACE APPLICATIONS</i> J. Barroeta Robles, C. Rousseau and P. Hubert McGill University and ENSIACET	
11	:05	<i>PREDICTION OF PUNCHING SHEAR STRENGTH OF EDGE SLAB-COLUMN CONNECTIONS REINFORCED WITH FRP BARS</i> A. Salama, M. Hassan, and B. Benmokrane Université de Sherbrooke	<i>PHOTOMECHANICAL STRESS ANALYSIS OF COMPOSITE STRUCTURES</i> N. Fatima, Y. Ro, A. Al-Shaya, J. Hunt and R. Rowlands University of Wisconsin-Madison	<i>CHARACTERIZATION OF THE BULK FACTOR OF AUTOCLAVE AND OUT-OF-AUTOCLAVE PREPREGS FOR SPACE APPLICATIONS</i> D. Liu and P. Hubert McGill University	:05 11
	:25	<i>CONCRETE FILLED FRP TUBE COLUMNS LONGITUDINALLY REINFORCED WITH FRP AND STEEL BARS</i> A. Ahmed and R. Masmoudi Université de Sherbrooke	<i>A DISCUSSION ON THE POTENTIAL USE OF ADDITIVE MANUFACTURING FOR STRUTURAL HEALTH MONITORING</i> C. Ayranci and G.W. Melenka University of Alberta	<i>AUTOMATED MANUFACTURING OF THERMOPLASTIC COMPOSITE RIVETS</i> V. Fortier, J. Brunel and L. Lebel École Polytechnique de Montréal and Bombardier Product Development Engineering	:25
	:45	<i>FLEXURAL BEHAVIOR OF FRP REINFORCED CONCRETE PILES</i> S. Mousa, H. Mohamed, and B. Benmokrane Université de Sherbrooke	<i>PERFORMANCE OPTIMIZATION OF FUNCTIONALIZED YARN FOR SMART SENSING APPLICATIONS</i> D. Badawy, S. Soltanian, P. Servati and F. Ko University of British Columbia	<i>EVALUATION OF THE MODE II CRITICAL ENERGY RELEASE RATE UNDER IMPACT FOR THERMOPLASTIC COMPOSITE LAMINATE USING INFRARED THERMOGRAPHY</i> P. Perez, F. Dau, C. Bouvet, L. Ballere and P. Peres I2M/ENSAM and ICA/ISAE	:45
12	:05	Lunch Break 12:05-13:30			:05 12
13	:30	Keynote 3 - "Automated Fiber Placement: As-Designed vs. As-Built", Jean-Philippe Marouze (Bombardier) 13:30-14:15 (room 4101)			:30 13
14	:15	Workshop 2: Real-World Challenges in Composite Transport Program Definition, Certification and Production Readiness (led by Airbus, Boeing, Bombardier) 14:15-15:00 (room 4101)			:15 14
15	:05	Coffee Break 15:00-15:15			:05 15
	:15	Keynote 4 - "Balancing Industrial Relevance and Academic Rigour: A Long-Term Study from Composite Manufacturing", Prof. Anoush Poursartip (UBC and Convergent Manufacturing Tech) 15:15-16:00 (room 4101)			:15
16	:00	Workshop 3: Barriers to Knowledge Transfer Within the Composite Applications Community (led by Convergent Manufacturing Tech., NSE Composites, Spirit, WSU, UBC, NRC) 16:00-16:30 (room 4101)			:00 16
	:30	Workshop 4: Composite Repair Technology Transfer from OEM and Regulators to Users (led by FAA, Airbus, Boeing, Bombardier) 16:30-17:00 (room 4101)			:30
17	:00				:00 17
18	:30	Banquet @ Museum of History 18:00-21:30			:30 18

Thursday, July 20th, Morning

7	:00	Breakfast 7:00-8:15			:00	7
8	:15	Keynote 5 - "A350XWB From Certification to Industrial Phase, What Matters?", Chantal Fualdes (Airbus Industries) 8:15-9:00 (room 1160)			:15	8
9	:10	Oral Sessions - 9:10-10:30			:10	9
		Innovative Nanomaterials (room 1110)	Damage Evolution (room 1120)	Armour & Protection (room 1160)		
		<i>PRODUCTION OF POLYURETHANE/NANOTUBE COMPOSITES WITH TAILORABLE PROPERTIES AND FUNCTIONALITIES</i> Y. Martinez-Rubi, B. Ashrafi, M.J Jakubinek, S. Zou, C. Homenick, K. Laqua, M. Barnes, K. Kim, C. Kingston and B. Simard National Research Council Canada	<i>MESOSCALE MODELLING OF COMPRESSIVE RESPONSE AND DAMAGE EVOLUTION IN FLAX FIBRE REINFORCED LAMINATES</i> C. Nicolinco, Z. Mahboob, Y. Chemisky and H. Bougherara Ryerson University and Arts et Métiers ParisTech Metz	<i>COMPRESSIVE AND BENDING STRENGTH OF UHMWPE LAMINATES</i> Y. Zhang, R. Desnoyers, A. Johnston and Q. Yang National Research Council Canada		
	:30	<i>PREPREG-LIKE, HIGH-NANOTUBE-CONTENT COMPOSITES FROM EPOXY-INFILTRATED BORON NITRIDE NANOTUBE BUCKYPAPERS</i> M. Jakubinek, B. Ashrafi, Y. Martinez-Rubi, K. Laqua, D. Park, M. Oceau and B. Simard National Research Council Canada	<i>STRESS FIELD MODEL FOR IMPACT DAMAGE EVALUATION IN COMPOSITES</i> S. Russell Aerospace Structures Engineer	<i>THE CHEMISTRY OF BORON NITRIDE NANOTUBES (BNNTS) AND PC-BNNT COMPOSITES: TOWARDS TRANSPARENT ARMOUR APPLICATIONS</i> J. Guan, S. Derdouri, E. Patenaude, Y. Martinez-Rubi, B. Ashrafi, M. Jakubinek, K. Kim, C. Kingston and B. Simard National Research Council Canada	:30	
	:50	<i>ELECTRICALLY RESPONSIVE POLYURETHANE-CNT SHEETS FOR SENSING AND HEATING</i> B. Ashrafi, K. Laqua, Y. Martinez-Rubi, M. Jakubinek, D. Park and B. Simard National Research Council Canada	<i>FATIGUE OF FLAX-EPOXY LAMINATES UNDER CONSTANT STRAIN-AMPLITUDE CYCLING</i> Z. Mahboob, Z. Fawaz and H. Bougherara Ryerson University	<i>COMPOSITES HYBRIDIZATION USING UHMWPE CORE VIA ADHESIVE BONDING FOR BALLISTIC APPLICATIONS</i> S. Noormohammed, D. Boucher, S. Ouellet, S. Labonté and K. Williams National Research Council Canada and DRDC	:50	
10	:10	<i>INFLUENCE OF CARBON NANOTUBES ON STIFFNESS PROPERTIES OF MULTISCALE COMPOSITE BLADES HAVING AIRFOIL-SHAPE CROSS-SECTION</i> M. Rafiee, F. Nitzsche and M. Labrosse University of Ottawa and Carleton University	<i>MECHANICAL PROPERTIES OF CHEMICALLY DEGRADED AEROSPACE FIBRE-REINFORCED POLYMER MATRIX COMPOSITES</i> J. Carette, L. Kincaid, J. Laliberte and M. Faragalli Carleton University and General Dynamics Mission Systems	<i>INTERMEDIATE STRAIN RATE CHARACTERIZATION OF MATERIALS USING A HIGH SPEED SERVO-HYDRAULIC LOAD FRAME</i> A. Naftel and M. Rahmat National Research Council Canada	:10	10
	:30	Coffee Break 10:30-10:45			:30	
	:45	Oral Sessions - 10:45-12:05			:45	
		Novel Hybrid Materials (room 1110)	Braided/Pultruded & Sandwich (room 1120)	Impact (room 1160)		
		<i>METALLIZATION OF CARBON FIBRE REINFORCED COMPOSITES USING GRIP METAL™ AND COLD SPRAY</i> Y. Xu, F. Robitaille and B. Jodoin University of Ottawa	<i>COMPLEX AIRCRAFT FUSELAGE FRAME MANUFACTURING USING AUTOMATED BRAIDING AND INFUSION</i> P. Monnot, J. Levesque, R. Dubé and L. Laberge Lebel École Polytechnique Montréal, Groupe CTT and CTA	<i>A PRACTICAL ANALYTICAL MODEL FOR PREDICTING RESPONSE OF 3D FIBERGLASS FABRIC SUBJECTED TO IMPACT LOADING</i> Z. Asaee and F. Taheri Dalhousie University		
11	:05	<i>UNDERSTANDING THE PARAMETERS THAT INFLUENCE BUCKLING OF 3D FIBER-METAL LAMINATES</i> D. De Cicco and F. Taheri Dalhousie University	<i>MECHANICAL PERFORMANCE OF REPAIRED SANDWICH PANELS: EXPERIMENTAL AND NUMERICAL INVESTIGATIONS</i> E. Ghazali, M. Dano and A. Gakwaya Université Laval	<i>LOW VELOCITY IMPACT ASSESSMENT OF KEVLAR/FLAX-EPOXY COMPOSITE USING IR THERMOGRAPHY</i> B. Sy, H. Bougherara, Z. Fawaz and A. Sarwar Ryerson University	:05	11
	:25	<i>IMPACT FATIGUE PERFORMANCE OF ADHESIVE BONDED STRUCTURES BASED ON GRIP METAL™ CONCEPT</i> A. Fawcett, C. Li, X. Huang and N. Samardzic Carleton University and National Research Council Canada	<i>FIBER-LEVEL BI-AXIAL BRAID SIMULATION FOR BRAID-TRUSION</i> M. Ghaedsharaf, J. Brunel and L. Laberge Lebel École Polytechnique Montréal and Bombardier Product Development Engineering	<i>MECHANICAL CHARACTERIZATION OF PARTICLE-INFUSED ELASTOMERIC SYSTEMS</i> C. Comtois-Arnaldo and O. Petel Carleton University	:25	
	:45	<i>A PRELIMINARY INVESTIGATION OF FIBER-METAL-LAMINATES WITH GRIP METAL™</i> M. Miller, R. Greiss, V. Nguyen, K. Slew, C. Li, X. Huang, M. El-Sayed and E. Matida Carleton University and National Research Council Canada	<i>SIMPLIFIED FAILURE MODE MAPS FOR SANDWICH BEAMS</i> A. Mondal and S. Nakhla Memorial University of Newfoundland	<i>SPALL STRENGTH MEASUREMENTS OF EPOXY POLYMERS</i> J. Pepper, J. Huneault, O. Petel and M. Rahmat Carleton University and National Research Council Canada	:45	
12	:05	Lunch Break 12:05-13:30			:05	12

Thursday, July 20th, Afternoon

		Thursday, July 20th, Afternoon				
12	:05	Lunch Break 12:05-13:30			:05	12
13	:30	Oral Sessions - 13:30-14:50			:30	13
		Reinforcement & Mechanical Performance (room 1110)	Damage in Sandwich Panels (room 1120)	Failure Onset & Progression (room 1160)		
		<p align="center"><i>STRENGTH OF MULTI-BOLT HYBRID BONDED/BOLTED COMPOSITE JOINTS: A PARAMETRIC STUDY ON GEOMETRIC PARAMETERS</i> V. Romanov, J. Bae and L. Lessard McGill University</p>	<p align="center"><i>SURFACE DAMAGE EVALUATION OF FLAT HONEYCOMB COMPOSITE AIRCRAFT PANELS USING 3D SCANNING TECHNOLOGY</i> T. Reyno, D. Wowk and C. Marsden Royal Military College of Canada and Concordia University</p>	<p align="center"><i>UNIT CELL MODELING OF FAILURE BEHAVIOR FOR STATICALLY-LOADED KEVLAR FIBER TUBULAR BRAIDED COMPOSITES IN TENSION</i> E. Lepp and J. Carey University of Alberta</p>		
	:50	<p align="center"><i>RESIDUAL STRESS IN THICK THERMOSET COMPOSITE LAMINATES MADE BY AUTOCLAVE PROCESS</i> S. Mamani and S. V. Hoa Concordia University</p>	<p align="center"><i>CORRELATION OF DAMAGE CHARACTERISTICS IN DENTED ALUMINUM HONEYCOMB SANDWICH PANELS</i> G. Clarke, D. Wowk and C. Marsden Royal Military College of Canada and Concordia University</p>	<p align="center"><i>AGEING QUALIFICATION RULES FOR AERONAUTICAL MONOLITHIC COMPOSITES</i> M. Vellas, C. Fualdes, and Y. Gourinat ISAE / Airbus</p>	:50	
14	:10	<p align="center"><i>GEOMETRICAL INSTABILITIES IN ASYMMETRIC PLATES REINFORCED WITH 3D INTERLOCK FABRICS</i> M. Benavente, L. Marcin, M. Levesque and E. Ruiz École Polytechnique de Montréal and Safran Tech</p>	<p align="center"><i>A METHOD TO IMPACT AND CHARACTERIZE DAMAGE FOR NONSTANDARD COMPOSITE SANDWICH PANELS</i> S. Prior, C. Marsden and D. Wowk Royal Military College of Canada, Concordia University and the Department of National Defence</p>	<p align="center"><i>FAILURE INITIATION IN COMPOSITES FROM MICROMECHANICAL POINT OF VIEW</i> H. Ghayoor, S. V. Hoa and C. Marsden Concordia University</p>	:10	14
	:30	<p align="center"><i>A NEW HYBRID FATIGUE MODELING FOR SHORT FIBER REINFORCED COMPOSITES</i> M. Laribi, S. Tamboura, J. Fitoussi, R. Tiebi, H. Bendaly and A. Tcharkhtchi PIMM ENSAM ParisTech and LMS ENISo, Tunisia</p>	<p align="center"><i>IN-PLANE MECHANICAL BEHAVIOUR OF COMPOSITE MATERIAL AND OUT-OF-PLANE BEHAVIOUR OF SANDWICH PANEL UNDER EXTREME TEMPERATURES</i> M. Jean-St-Laurent, M. Dano and M. Potvin Université Laval and the Canadian Space Agency</p>	<p align="center"><i>AUTOMATING XFEM TECHNIQUE FOR CRACK ONSET OF COMPOSITES</i> A. Elruby and S. Nakhla Memorial University of Newfoundland</p>	:30	
	:50	End of Conference			:50	

Attendee Package

Canadian-International Composites Conference

CANCOM2017

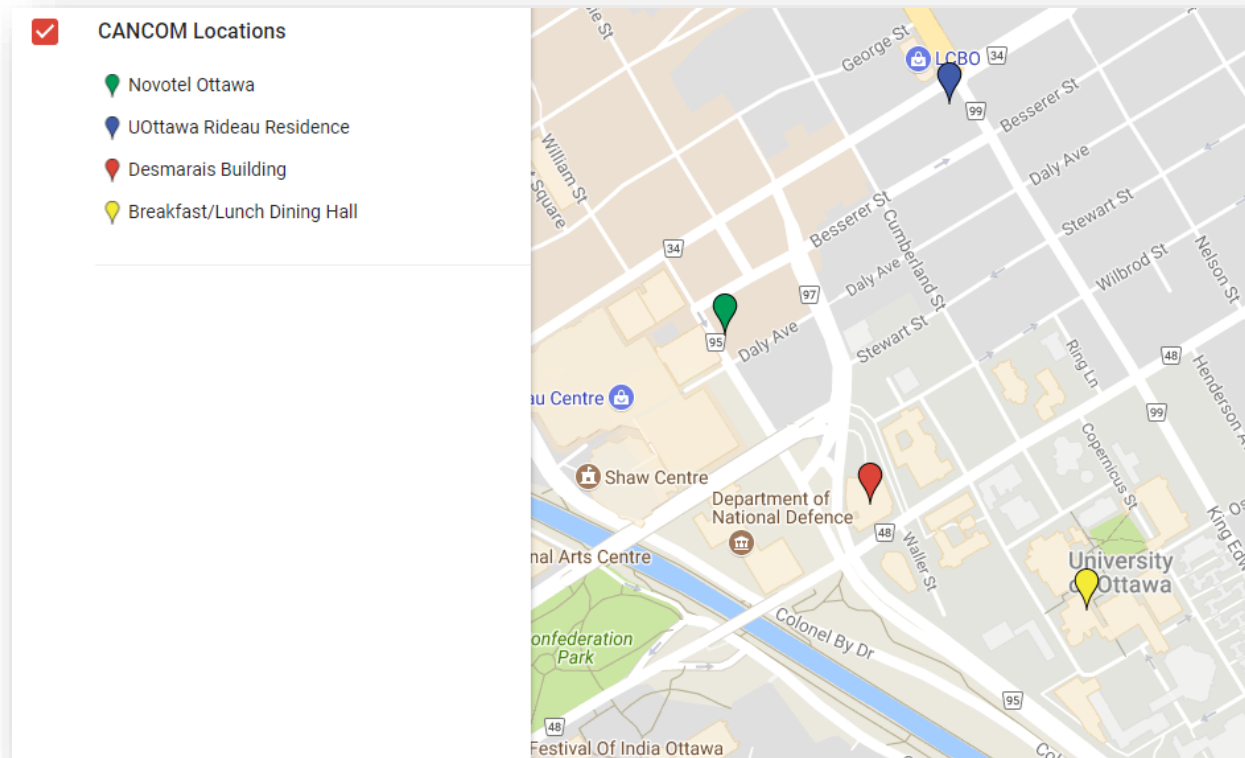
17 - 20 July 2017, Ottawa, Ontario, Canada

"Advanced Composites in Addressing Global Challenges of the 21st Century"

Desmarais building, 55 Laurier Ave E, Ottawa University



Maps and Directions



[Interactive online map](#)

Directions from Novotel to Desmarais

Walking in from the Novotel to Desmarais Hall is a 5 minutes leisurely walk. Upon exiting the Novotel main lobby turn to your left (south); Desmarais Hall will be in view. Simply make your way along Nicholas Street.

Directions from uOttawa hall of residences on Rideau Street to Desmarais

Walking in from the uOttawa hall of residences on Rideau Street will take 10 to 12 minutes. Upon exiting the hall, turn to your left (west) on Rideau and walk in the direction of Parliament. Walk past Cumberland, Waller, Dalhousie and then turn left on the pedestrian section of Nicholas. Walk on to the Novotel and beyond to Desmarais Hall. Taking a taxi is possible but unwarranted for most.

Conference registration:

The conference registration will take place in the lobby of **Desmarais Building, 55 Laurier Ave E**. Please bring a Photo ID with you (driver's license, passport, etc). The CANCOM17 badges will be checked at the doors.

All conference activities take place at the Desmarais building, expect for the banquet (**Canadian Museum of History**) and the Monday afternoon hands-on tutorial on bonded repair (**Colonel by Hall (CBY), room C011, 161 Louis Pasteur, University of Ottawa**). Pre-registration specific to the tutorials is mandatory for attending the tutorials, as space is limited.

Breakfast, lunch and coffee breaks:

Tickets for breakfast (Tuesday – Thursday, 7:00-10:00am and lunch (Monday – Thursday, 12:00-13:30) are provided at the University Dining Hall (see Map 1). The dining hall is located within the **Jock-Turcot University Centre, 85 University Private, Ottawa, ON K1N 9A7**.

Please note that all vouchers cannot be replaced or refunded. Please keep all food and drink vouchers with you. If there are vouchers that will not be used, please give the vouchers to the registration desk to share with people in need.

Coffee, tea, water and light refreshments are provided during morning and afternoon breaks in the Desmarais building.

Workshops and reception:

All workshops (Tuesday July 18th starting at 16:15 and July 18th Wed at 13:30), and reception (Tuesday July 18th 18:30-20:30) will take place in Room 4101, the fourth floor of Desmarais Building. All are welcome.

One drink voucher will be provided for each guest at the reception. Wine, beers, and spirits, and soft drinks will be provided. A cash bar will be open during the reception if the guests wish to purchase additional drinks.

Coffee, drinks and refreshments will be provided for the Tuesday workshop and reception.

Banquet, bus transportation and parking:

The CANCOM2017 Banquet will be held at the spectacular Grand Hall of the **Canadian Museum of History, July 19th (Wed) from 18:00 – 22:30pm**.

The “Dig” exhibition will be provided to CANCOM17 attendees during cocktail and after dinner. The banquet dinner will feature Professor Suong V. Hoa Student Paper Awards, performance from a professional Canadian pianist, and a keynote speech of one of our best aerospace scientists.

A drink voucher will be provided during cocktail hours between 18:00-18:40pm, and white/red wine will be served during the meal.

Bus transportation is provided between downtown hotels and the museum:

Pick up location: **Novotel Ottawa (Nicolas and Daly) at 17:30 – 17:45pm (3 buses in total) –**

UOttawa Rideau Residence (King Edward and Rideau) at 17:30 (one bus only)

Buses are also provided to bring the guests back to the hotels after the banquet after 21:30 to 22:30pm. An extra stop will be provided at Rideau Residence upon request.

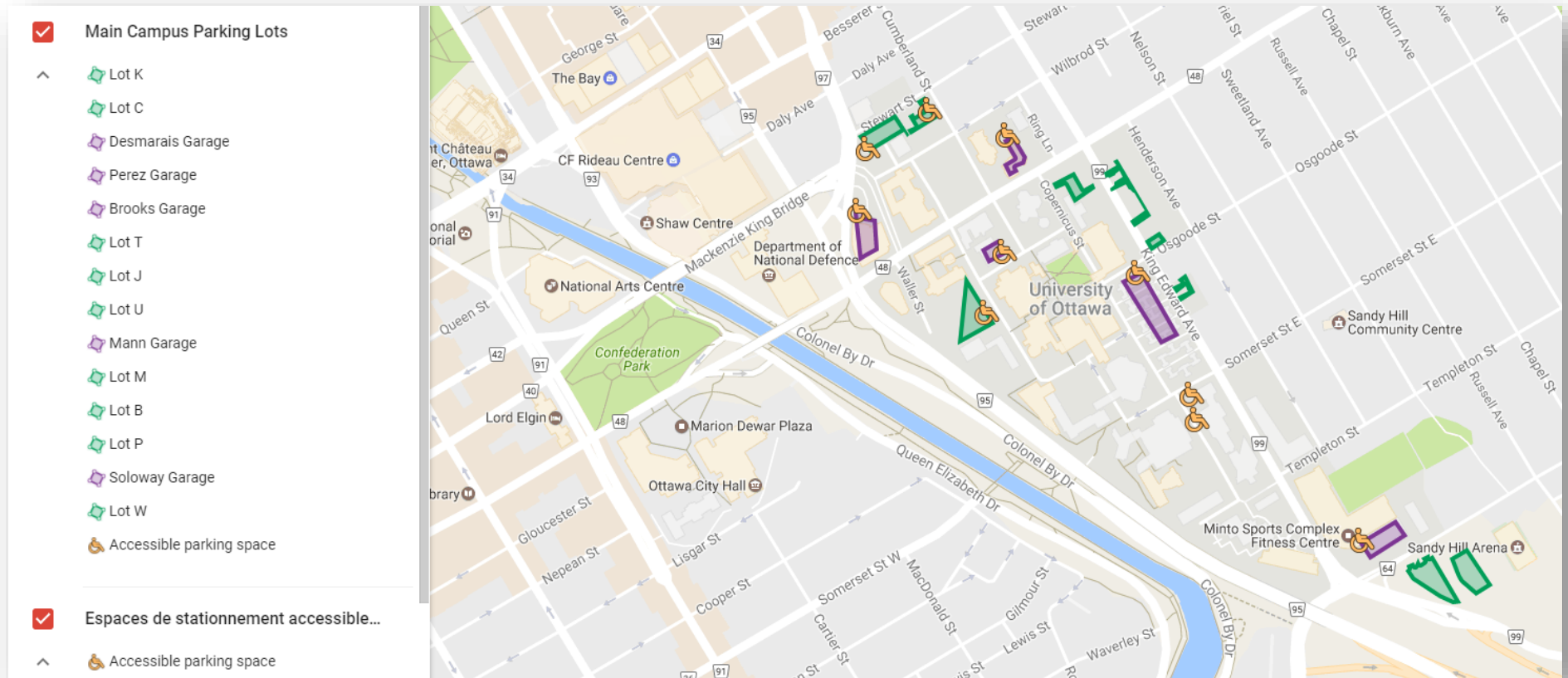
Parking at the museum is available at the evening rate \$6 after 18:00pm.

Wi-Fi access

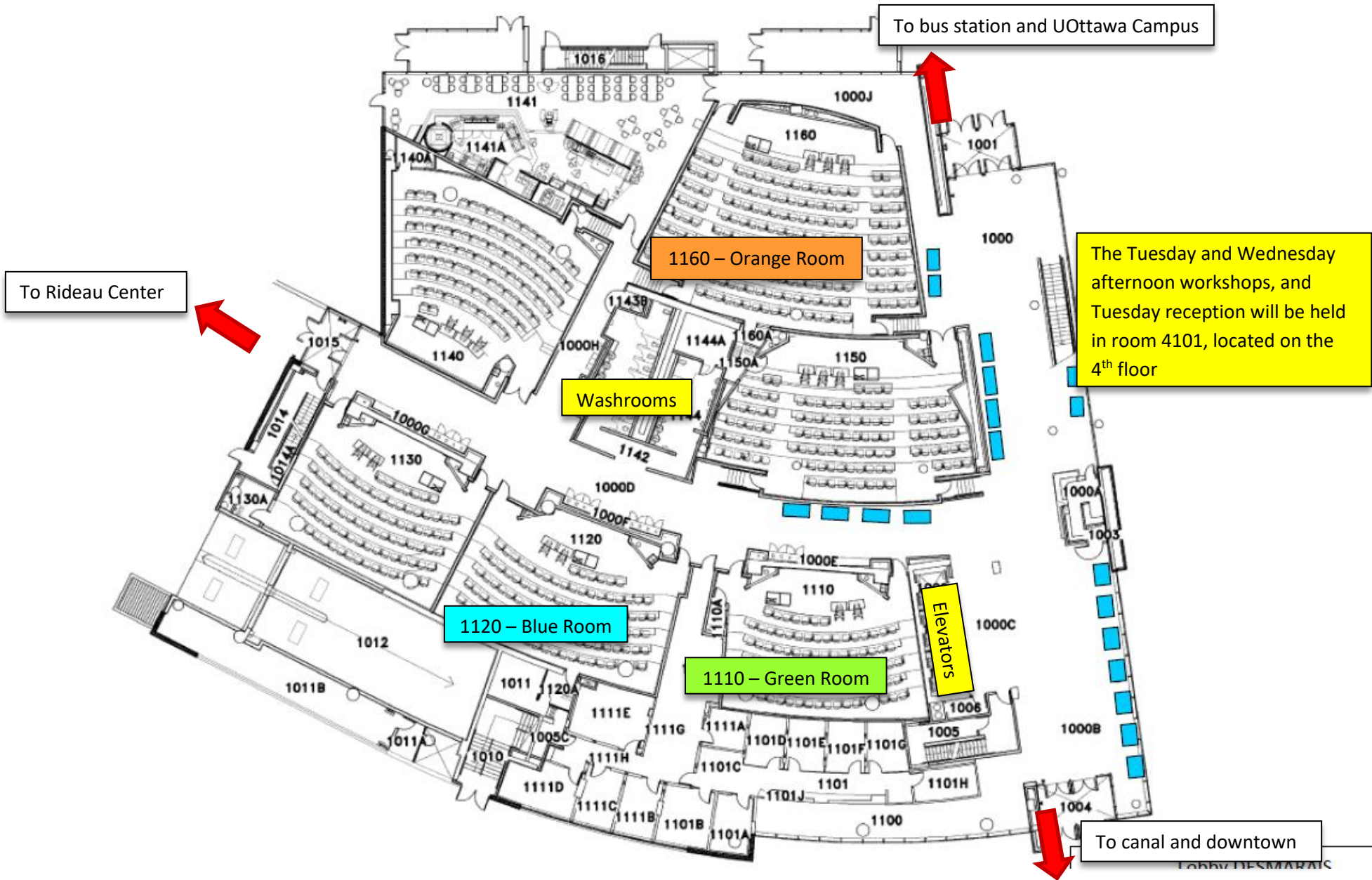
Free Wi-Fi is provided during the conference week at the Desmarais building. No password is required.

Parking

Parking locations can be found on the map below. [Interactive Online Map](#)



Desmarais Building, 55 Laurier Ave E



What to do in Ottawa

Ottawa 2017 150TH SPECIAL

- Ottawa 150 website <http://www.ottawa2017.ca/>
- Ottawa Tourism Website <https://www.ottawatourism.ca/see-and-do/>
- MosaicCanada 150 [website: http://www.gatineau2017.ca/mosaiccanada-150gatineau-2017/](http://www.gatineau2017.ca/mosaiccanada-150gatineau-2017/) - Jacques-Cartier Park will host the biggest horticultural event in Canada June 30- Oct 15th
- Sky Lounge: enjoy a gourmet meal while sitting at a table suspended 150 feet above Ottawa City Hall (available during CANCOM17 week ONLY). <http://www.ottawa2017.ca/events/signature-events/sky-lounge/>
- Kontinuum: an ultimate underground experience with a futuristic and immersive multimedia production created by none other than Moment Factory and projected in one of Ottawa's future Light Rail Transit (LRT) stations. <http://www.ottawa2017.ca/events/signature-events/underground-multimedia-extravaganza/>
- Northern Lights: Sound and light show on parliament hill <https://www.ottawatourism.ca/member/sound-and-light-show-on-parliament-hill-northern-lights/>

Museums

- Canadian Museum of History: <http://www.historymuseum.ca/>
- National Gallery of Canada: <http://www.gallery.ca/en/>
- Canadian War Museum: <http://www.warmuseum.ca/>
- Canadian Museum of Nature: <http://nature.ca/en/home>
- Canada Aviation and Space Museum: <http://www.casmuseum.techno-science.ca/>
- Canada Agriculture and Food Museum: <http://cafmuseum.techno-science.ca/en/index.php>
- Bytown Museum: <http://www.ottawamuseums.com/bytown-museum.aspx>

Historic Sites

- Rideau Canal

- National War Memorial
- Parliament Hill
- Rideau Hall: Governor Generals house and park
- Nepean Point/Major Hill's park
- Notre-Dame Cathedral Basilica
- Supreme Court of Canada
- Royal Canadian Mint
- Confederation Park
- Ottawa City Hall

Nature/Parks

- Gatineau park: well-maintained trails for biking and hiking <http://ncc-ccn.gc.ca/places-to-visit/gatineau-park>
- Dominion Arboretum

Shopping

- Byward Market: lively market right near the hotels with many unique shops, stands, and restaurants as well as busker performances
- Rideau Center: Ottawa's largest shopping center located between the canal and the UOttawa campus
- Sparks Street: downtown pedestrian only street with many historic buildings

Activities

- National Arts Center: <https://nac-cna.ca/en/> with free shows throughout July
- Ottawa features many beautiful bike paths that pass by many of Ottawa's historical sites, museums, and parks. There are multiple bike rental services located downtown, making it convenient to explore Ottawa by bike
- There are many boat site seeing boat tour services in Ottawa that give you elegant views of Ottawa from both the Ottawa River and Rideau Canal
 - <https://www.ottawatourism.ca/see-and-do/tours-sightseeing/>
 - <http://capitalcruises.ca>
 - <http://rideaucanalcruises.ca/en/>

- http://www.escapebicycletours.ca/rentals-maps/?gclid=CPnP5_iodQCFQcaaQodPiYB1w
- <https://velogo.ca/>
- <http://www.rentabike.ca/about-us/#findus>
- Escape Manor: Work with a group of friends to collect clues and solve puzzles in order to escape before the time runs out. <https://www.escapemanor.com/ottawa>
- Casino du Lac-Leamy: <http://casinos.lotoquebec.com/en/lacleamy/home>

Restaurants

The University of Ottawa Campus is conveniently located between Ottawa's neighborhoods with the best selection of restaurants in the city, those being the Byward Market and Elgin Street.

Byward Market: the market is the center of Ottawa's night life community and includes many bars, pubs, and clubs, as well as many unique restaurants that are local favourites. Some suggestions for restaurants for a wide array of tastes in the Byward:

- Play Food & Wine: Sister restaurant to Beckta Dining & Wine, fine dining with a constantly changing menu
- The Loft: The Loft is a pub with a huge selection of board games for you and your friends to play while enjoying the food and friendly atmosphere
- Eighteen18: <https://www.restaurant18.com/>
- Tucker's Marketplace: The market's most popular all-you-can eat buffet, with a wide range of food options
- The Grand Pizzeria: Italian restaurant and pizzeria located in the historic building of the old Grand Hotel
- Cacao 70: A Canadian restaurant that specializes in all things chocolate, and not just for dessert
- Zak's Diner: A retro themed diner in the heart of the market, Zak's is known for its standout milkshakes
- Smoke's Poutinerie: The most famous poutine in Ottawa!
- And many others!

Elgin Street: Located across the Rideau canal from the Ottawa U campus, Elgin Street boasts many of Ottawa's most popular restaurants with a more relaxed atmosphere than the busy market. Some places to check out are:

- Elgin Street Diner: The famous retro diner that never closes!
- Le Café: The National Arts Centre's fine dining experience

- Beckta Dining & Wine: Sister restaurant to Play Food & Wine, fine dining with a constantly changing menu
- Town: Smart upgrades on Italian classics
- Datsun: One of Ottawa premier restaurants for Asian cuisine

Spark Street: Several nice places to eat, including the Bier Markt <http://www.thebiermarkt.com>

If you decide to go exploring the rest of Ottawa, then here are some more of Ottawa's favourite restaurants that are spread around the city.

- The Works
- Atelier
- Allium
- The Green Door
- Baton Rouge
- Riviera
- Mill street Brewery
- Le Cordon Bleu Ottawa Culinary Arts Institute