NSERC CREATE oN DuTy! serving industry

3rd Annual General Meeting — **3e Assemblée Générale Annuelle** — 2021

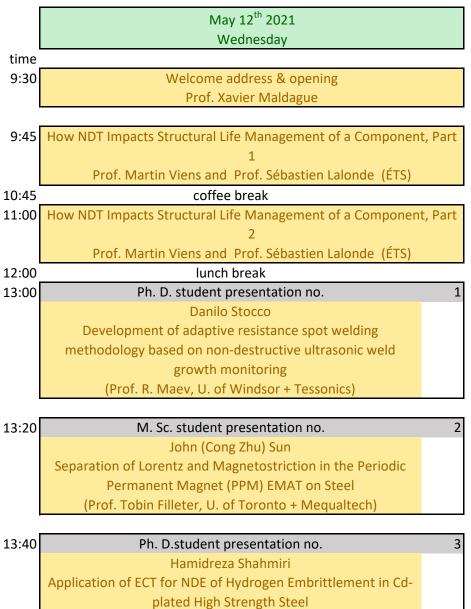## Welcome to 2021 oN DuTy! AGM

Notes:

- All participants will receive a ZOOM link 1 or 2 days before Day 1, there will be a ZOOM link for Day 1 and a Zoom link for Day 2

- The order of student presentations was sorted randomly

- The main supervisor is listed for all students along with the industrial partner

- Student presentations are 15 min long + 5 min for questions, please keep the timing!

- Student Presentations will be evaluated by the Academic Committee following the criteria presented in the last page of this program
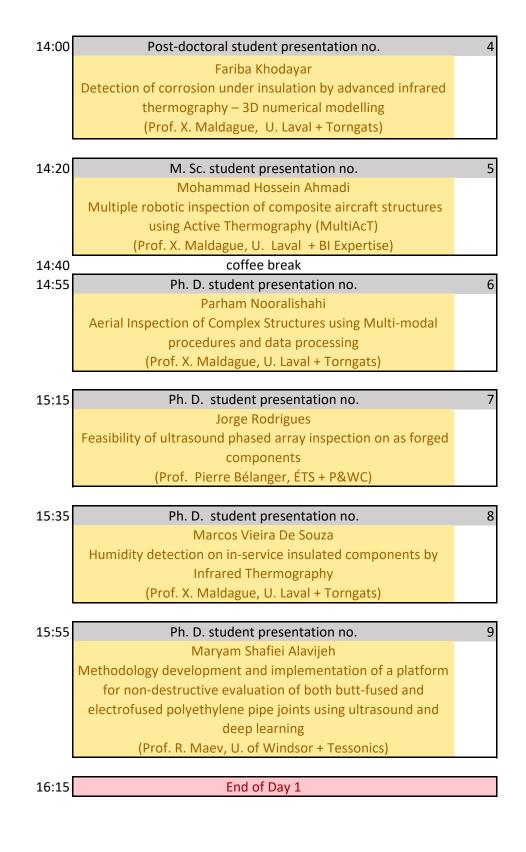
- Schedule subject to changes!

University of Windsor · UNIVERSITY OF TORONTO · ÉTS Le génie pour l'industrie · UNIVERSITÉ LAVAL · CRSNG NSERC

oN DuTy! 2021 AGM - Day 1

May 12th 2021
Wednesday

time	
9:30	**Welcome address & opening** Prof. Xavier Maldague
9:45	How NDT Impacts Structural Life Management of a Component, Part 1 Prof. Martin Viens and Prof. Sébastien Lalonde (ÉTS)
10:45	coffee break
11:00	How NDT Impacts Structural Life Management of a Component, Part 2 Prof. Martin Viens and Prof. Sébastien Lalonde (ÉTS)
12:00	lunch break

13:00	Ph. D. student presentation no.	1
	Danilo Stocco Development of adaptive resistance spot welding methodology based on non-destructive ultrasonic weld growth monitoring (Prof. R. Maev, U. of Windsor + Tessonics)	

13:20	M. Sc. student presentation no.	2
	John (Cong Zhu) Sun Separation of Lorentz and Magnetostriction in the Periodic Permanent Magnet (PPM) EMAT on Steel (Prof. Tobin Filleter, U. of Toronto + Mequaltech)	

13:40	Ph. D.student presentation no.	3
	Hamidreza Shahmiri Application of ECT for NDE of Hydrogen Embrittlement in Cd-plated High Strength Steel (Prof. Martin Viens, ÉTS+CRIAQ)	

| 14:00 | Post-doctoral student presentation no. | 4 |

Fariba Khodayar
Detection of corrosion under insulation by advanced infrared thermography – 3D numerical modelling
(Prof. X. Maldague, U. Laval + Torngats)

| 14:20 | M. Sc. student presentation no. | 5 |

Mohammad Hossein Ahmadi
Multiple robotic inspection of composite aircraft structures using Active Thermography (MultiAcT)
(Prof. X. Maldague, U. Laval + BI Expertise)

| 14:40 | coffee break |

| 14:55 | Ph. D. student presentation no. | 6 |

Parham Nooralishahi
Aerial Inspection of Complex Structures using Multi-modal procedures and data processing
(Prof. X. Maldague, U. Laval + Torngats)

| 15:15 | Ph. D. student presentation no. | 7 |

Jorge Rodrigues
Feasibility of ultrasound phased array inspection on as forged components
(Prof. Pierre Bélanger, ÉTS + P&WC)

| 15:35 | Ph. D. student presentation no. | 8 |

Marcos Vieira De Souza
Humidity detection on in-service insulated components by Infrared Thermography
(Prof. X. Maldague, U. Laval + Torngats)

| 15:55 | Ph. D. student presentation no. | 9 |

Maryam Shafiei Alavijeh
Methodology development and implementation of a platform for non-destructive evaluation of both butt-fused and electrofused polyethylene pipe joints using ultrasound and deep learning
(Prof. R. Maev, U. of Windsor + Tessonics)

| 16:15 | End of Day 1 |

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3rd **Annual General Meeting**

2021

3e *Assemblée Générale Annuelle*

oN DuTy! 2021 AGM - Day 2

May 13th 2021 Thursday

time

9:30	Welcome to Day 2

9:35	The untapped potential of Digital X-ray in NDT Luc Perron (LynX Inspection)

10:35	Ph. D. student presentation no.	10
	Roger Booto Assisted Defect Recognition: A Deep Learning Journey in Industrial Digital Radiography Inspection (Prof. X. Maldague, U. Laval + LynX Inspection)	

10:55	Post-doctoral student presentation no.	11
	Andrew Ouellette Development of an adaptive, high-resolution ultrasound imaging device for automotive joint inspection (Prof. R. Maev, U. of Windsor + Tessonics)	

11:15	coffee break

11:30	Ph. D. student presentation no.	12
	Elnaz Shokouhi Development of Multispectral Truncated-Correlation Photothermal Coherence Tomography (Multispectral TC-PCT) (Prof. Andreas Mandelis, U. of Toronto + Quantum Dental Technologies)	

11:50	Ph. D. student presentation no.	13
	Samira Ebrahimi Development of IRT NDT technique for the inspection of composites materials for aerospace and other industries (Prof. X. Maldague, U. Laval + Visiooimage)	

12:10	lunch break

13:10	Ph. D. student presentation no.	14
	Mohammad Bajgholi	
	Advanced ultrasonic inspection technologies applied to the welded joints of hydraulic turbine runners	
	(Prof. Martin Viens, ÉTS+CRIAQ)	

13:30	Ph. D. student presentation no.	15
	Farima Abdollahi Mamoudan	
	Material inspection using new electromagnetic testing technology (capacitive sensing)	
	(Prof. H. Bendada, U. Laval + Eddyfi)	

13:50	Post-doctoral student presentation no.	16
	Pantea Tavakolian	
	Non-Invasive In-Vivo 3-D Imaging of Small Animals Using Spatially Filtered Enhanced Truncated-Correlation Photothermal Coherence Tomography	
	(Prof. Andreas Mandelis, U. of Toronto + Quantum Dental Technologies)	

14:10

The State of Women in STEM and NDE
Laura Obrutsky
President
M&O Tech Inc.

14:55

Award announcement: Best Student presentation
& Closing ceremony

15:25

End of AGM 2021

15:40

Meeting of the oN DuTy! Program Committee
(for Committee members, Zoom link provided separately)

#	Student name	cycle	1. Content	2. Media	3. Delivery	4. Answers	Total score
			1 (poor) - 2 (fair) - 3 (average) - 4 (good) - 5 (outstanding)				
1	Danilo Stocco	Ph. D.					0
2	John (Cong Zhu) Sun	M. Sc.					0
3	Hamidreza Shahmiri	Ph. D.					0
4	POST-DOCTORAL (not evaluated)	PDF	not evaluated				
5	Mohammad Hossein Ahmadi	M. Sc.					0
6	Parham Nooralishahi	Ph. D.					0
7	Jorge Rodrigues	Ph. D.					0
8	Marcos Vieira De Souza	Ph. D.					0
9	Maryam Shafiei Alavijeh	Ph. D.					0
10	Roger Booto	Ph. D.					0
11	POST-DOCTORAL (not evaluated)	PDF	not evaluated				
12	Elnaz Shokouhi	Ph. D.					0
13	Samira Ebrahimi	Ph. D.					0
14	Mohammad Bajgholi	Ph. D.					0
15	Farima Abdollahi Mamoudan	Ph. D.					0
16	Pantea Tavakolian	PDF	not evaluated				

1. Content
Background, context, objectives
Clear methodology
Significant results, adequate analysis

2. Media

Appropriate font size
Use of concise bullets (not complete sentences)
Clear and comprehensive figures/tables
General aesthetics of the slides

3. Delivery
Professionalism and confidence
Engaged with the audience
Clarity of voice and pace
Language (avoiding jargon)
Respect of the allocated time

4. Answer to questions
Proficiency in the subject

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