

3Ddose

Québec - 2022

JUNE 19-22 2022 | 19 au 22 JUIN 2022

Québec City, Canada | Ville de Québec, Canada

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VOTRE  
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AFFAIRES



Photo : Québec, François Gamache

Detailed Program of the  
**12th INTERNATIONAL CONFERENCE ON 3D  
and ADVANCED DOSIMETRY (IC3Ddose)**  
June 2022, Château Frontenac, Quebec City.

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Welcome to the 12th edition of the DosGel/IC3Ddose biennial gathering of scientists on the topic of advanced dose measurements, including 3D and 4D dose imaging. This meeting is a unique opportunity for everyone interested in these topics, including graduate students and medical physics residents, to have one-on-one exchanges with the world-leading experts in the field. In addition to regular contributed talks, vendor exhibit, and a poster session, the 2022 edition will feature over a dozen refresher courses, a Rising Star oral talk competition as well as panel discussions and debates.

Topics (but not limited to)

- 3D and 4D dosimetry;
- GEL dosimetry;
- Film dosimetry;
- EPID dosimetry;
- Scintillation and Cherenkov;
- End-to-end QA;
- Dosimetry in extreme conditions:
  - Small field;
  - MR-Linac;
  - FLASH.

You will find last year's presentations here: <https://youtube.com/playlist?list=PL0wwIxJBoN1AiczRciTFBO-wFA28zv1Ku>

## Organizing committee

Louis Archambault (ULaval, Canada)	Luc Beaulieu (ULaval, Canada)
Kevin Jordan (Western Ontario, Canada)	Andrew Jirasek (UBC-O, Canada)
Boyd McCurdy (UManitoba, Canada)	John Schreiner (Queen's, Canada)

## International Committee

Sven Bäck (Skane, Sweden)	Clive Baldock (Western Sydney, Australia)
Peter Balling (Aarhus, Denmark)	Sam Beddar (MD Anderson, USA)
Sofie Ceberg (Lund, Sweden)	Yves De Deene (Macquarie, Australia)
Simon Doran (ICR, UK)	Geoffrey Ibbott (Vermont, USA)
Mark Oldham (Duke, USA)	

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# AT A GLANCE

	See detailed program for accurate session times					
Time	Sunday June 19th	Monday June 20th	Tuesday June 21st	Wednesday June 22nd	Thursday June 23rd	
08:30 - 09:10		On-site registration / Badge pickup <b>09:00 Opening</b>	On-site registration / Badge pickup	On-site registration / Badge pickup / COMP pre-meeting day	<b>COMP Panel (in COMP meeting room): FLASH in Radiotherapy - Mechanisms, Technology, Dosimetry and Delivery</b>	
09:10 - 09:30		Invited talks	Invited talks	Invited talks		
09:30 - 10:30		Invited talks				Invited talk
10:30 - 10:50		<b>Pause santé / Health Break / Exhibit</b>				
10h50-11h30						Invited talk
11:30 - 12:00		Proffered session	Proffered session	Proffered session	vendor talks, Awards, future meetings	
12:00 - 13:00		Lunch and exhibit		Lunch and exhibit	Lunch	
13:00 - 14:20		<b>Rising Stars Competition</b>	Free to roam the old City and enjoy a terrasse!	<b>Dosimetry in Extreme Conditions</b>	<b>COMP Young Investigators Symposium: IC3Ddose participants invited!</b>	
14:25 - 15:15						
15:15 - 15:35		<b>Pause santé / Health Break</b>		<b>Pause santé / Health Break</b>		
15:35 - 16:15		Invited talk	Invited talk and Proffered (start at 15h20)	<b>Dosimetry in Extreme Conditions (cont...)</b>		
16:15-17:00		<b>Meet the Speakers / Posters of the day</b>		<b>Meet the Speakers / Poster Session</b>		
17:00 - 17:30	Welcome Registration	<b>Virtual session</b>	<b>Meet the Speakers / Posters of the day</b>			
17:30 - 18:00				<b>Joint IC3Ddose-COMP Keynote - by Dr John Schreiner</b>		
18h30-						
<b>Evening</b>	Free to explore the city	Free to explore the city	TBD	Joint Social / Exhibit		

## DAY 1 – JUNE 20th

CT: Contributed Talk, IS: Invited Speaker, KL: Keynote Lecture, IT: Invited Talk.

8h15	<b>On site Registration / Badge pickup</b>		
9h00	<b>Opening of the 12th IC3Ddose conference</b>		
9h10-10h30	<b>Refresher #1</b> Chair : Michelle Hilts, UBC-O, Canada		
9h10-9h50	IS	<b>L. John Schreiner</b> Queen's University, Canada	End-to-End QA
9h50-10h30	IS	<b>Simon Doran</b> Division of Radiotherapy and Imaging, ICR, UK	Gel dosimetry: Optical reading
10h30-10h50	<b>Health Break</b>		
10h50-12h00	<b>Proffered session #1</b> Chairs : Sven Bäck and Andrew Jirasek		
10h50-11h05	CT	<b>Nathaniel Woolvett and Kevin Jordan</b> London, Ontario, Canada	Modified optical computed tomography scanner for low temperature scanning
11h05-11h20	CT	<b>Andy Ogilvy, S Collins, M Guenter, D Huang, W Hare, M Hilts, and A Jirasek</b> UBC-O, Canada	Preliminary commissioning of a prototype solid tank optical CT scanner for 3D radiation dosimetry
11h20-11h35	CT	<b>Mélissa Cinq-Mars, J-D Jutras and L Beaulieu</b> Université Laval, Canada	On the comparison of two NIPAM gel dosimeters with high resolution 3D MRI sequences
11h35-11h50	CT	<b>Lia Barbosa Valdetaro, Ludvig Paul Muren, Peter Sandegaard Skyt, Jørgen Breede Baltzer Petersen and Peter Ballingu</b> Aarhus University, Denmark	Investigating the linear-energy-transfer and dose rate signal quenching of radiochromic silicone-based dosimeters for different compositions and curing times
12h00-13h00	<b>Lunch</b>		
13h00-15h15	<b>RISING STAR COMPETITION</b> Chairs : Geoff Ibbott and Sam Beddar		
13h00 -13h15	CT	<b>Marco Caprioli, L. Delombaerde M. De Saint-Huber, L. de Freitas Nascimento, S. S. Galvez Febles, K. Himschoot, B. van der Heyden, D. Vandenbroucke, R. De Roover, Leblans, W. Crijns</b> KU Leuven, Belgium	Fading correction for calibration of a novel 2D OSL-film dosimeters

13h15-13h30	CT	<b>Mads L. Jensen, Rosana M. Turtos, Ludvig P. Muren, Brian Julsgaard, and Peter Balling</b> Aarhus University, Denmark	3D optically-stimulated-luminescence-based dosimetry using LYSO:Ce scintillators
13h30-13h45	CT	<b>Mélotie Cyr, Victor D. Martinez, Devic Slobodan, Nada Tomic, David F. Lewis, Shirin A. Enger</b> McGill University, Canada	Investigation of the Dosimetry Characteristics of the GAFCHROMIC® EBT3 Film Response to Alpha Particle Irradiation
13h45-14h00	CT	<b>Elise Konradsson, M Blomstedt, C Jamtheim Gustafsson, S Å J Bäck, C Ceberg and S Ceberg</b> Skane University Hospital, Sweden	Dosimetric verification of conformal small field irradiation at a preclinical research platform – a polymer gel dosimeter feasibility study
14h00-14h15	CT	<b>Aline Rousseau, C Stien, S Dufreneix, G Boissonnat, JM Bordy, V Blideanu</b> CEA, France	End-to-end quality assurance for Volumetric Modulated Arc Therapy with Fricke-Xylenol orange-Gelatin gel dosimeters and dual-wavelength cone-beam optical CT scanner
14h15-14h30	CT	<b>Steve Collins, A Ogilvy, D Huang, W Hare, M Hilts and A Jirasek</b> UBC-O, Canada	Iterative Image Reconstruction Methodology in Optical CT Radiochromic Gel Dosimetry
14h30-14h45	CT	<b>Simon V Jensen, T B Erichsen, M B Jensen, E Worm, P R Poulsen, J B B Petersen, P Balling, D Q S Le and L P Muren</b> Aarhus University, Denmark	Developing a 3D-printing-based method to create anthropomorphic dosimeters for radiotherapy-delivery verification
15h00-15h20	<b>Health Break</b>		
15h20-16h00	<b>Refresher #2</b> Chair : Boyd McCurdy		
14:30-15:05	IS	<b>Yves De Deene</b> Liverpool hospital/Ingham institute, Australia	Gel dosimetry: MRI
16:30-18:00	<b>Meet the speakers / posters of the day (Beer included!)</b> The four proffered papers and the seven rising star competition presenters will be available at the poster boards to discuss their works. Slides presented will be displayed on the poster boards.		

17h00-18h00: IC3Ddose Virtual Session

+12h for China;

+13h for Japan;

+14h for Australia.

17h00-18h00		Chairs : Simon Doran and Kevin Jordan	
Each presentation will be of 10 min with an additional 2 min for live questions			
17h00 -17h12	CT	<b><u>Yves De Deene and Daniel Mason</u></b> Liverpool hospital/Ingham institute, Australia	Optimization of MRI pulse sequences and Gadobutrol doped polymer gel for real time 4D radiation dosimetry on the MRI-Linac
17h12-17h24	CT	<b><u>Tanya Kairn, L. Jessen, J. Bodnar, P. H. Charles, S.B. Crowe</u></b> Royal Brisbane and Women's Hospital, Australia	Lung radiotherapy verification with a 3D printed thorax phantom and an ionisation chamber array
17h24-17h36 <b>Retracted</b>	CT	<b><u>Morgan J Wheatley, and Y De Deene</u></b> Liverpool hospital/Ingham institute, Australia	Loss and reintroduction of the radical initiator into the FlexyDos3D silicone dosimeter for 3D printing
17h36-17h48	CT	<b><u>Rachael Wilks, S.B. Crowe, P. Chan, R. Cheuk, T. Kairn</u></b> Royal Brisbane and Women's Hospital, Australia	A 3D printed patient-specific vaginal mould for brachytherapy
17h48-18h00	CT	<b><u>Ryosuke Narita and Yoshinori Sakurai</u></b> Kyoto University, Japan	A characterization of dye gel dosimeters for boron neutron capture therapy - dose response to gamma rays
18h00-18h12	CT	<b><u>Libing Zhu, Xincheng Xiang, Xiangang Wang</u></b> Tsinghua University, Beijing, China	Preliminary research on the dose response of polymer gel dosimeter with carbon beam irradiation

18h15: DAY 1 CLOSED – FREE TO EXPLORE THE CITY



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