

APPENDIX XII

CONFERENCE & SEMINAR PRESENTATIONS

by members of the Medical Physics Unit : 2017 calendar year (x 62)

(presenter is indicated by an asterisk *)

(the names of staff members of the MPU are underlined, students are indicated by †)

1. A. Gauvin*, *Informatics I: The digital breast image – interoperability and management*, Canadian Organization of Medical Physicists (COMP) Winter School, Montebello, QC, February 01-03, 2017.
2. A. Gauvin*, *Informatics II: Medical displays in mammography*, Canadian Organization of Medical Physicists (COMP) Winter School, Montebello, QC, February 01-03, 2017.
3. I. Levesque*, M. Hobson, M. Serban, H. Patrocinio, W. Parker, *MRI for treatment simulation: Experience in the deployment of a dedicated MRI system and program expansion*, Canadian Organization of Medical Physicists (COMP) Winter School, Montebello, QC, February 01-03, 2017. Oral presentation.
4. Z. Ahmed†*, I. Levesque, *Advancing the reference region model for DCE-MRI*, Journée Scientifique du Réseau de Bio-Imagerie de Québec, Montreal Neurological Institute, Montréal, QC, February 10, 2017.
5. V. Fortier†*, I. Levesque, *Comparison of phase processing techniques for quantitative susceptibility mapping*, Journée Scientifique du Réseau de Bio-Imagerie de Québec, Montreal Neurological Institute, Montréal, QC, February 10, 2017.
6. S. Xing†*, C.R. Freeman, S. Jung, I. Levesque, *A probabilistic approach to automated classification of distinct pathological regions in soft tissue sarcoma using diffusion and T2 relaxation*, Journée Scientifique du Réseau de Bio-Imagerie de Québec, Montreal Neurological Institute, Montréal, QC, February 10, 2017.
7. J. Renaud†*, A. Sarfehnia, J. Bancheri†, J. Seuntjens, *Aerrow: A probe-format graphite calorimeter for use as a local absorbed dose standard for high-energy photon beams in the clinical environment*, 25th Annual Meeting of the Council on Ionizing Radiation Measurements & Standards (CIRMS), NIST, Gaithersburg, MD, March 27-29, 2017. Student **Travel Grant Awards Presentation**.
8. S. Hickling†*, H. Lei, M. Hobson, I. El Naqa, *Measuring radiation dose through the detection of radiation-induced acoustic waves*, 25th Annual Meeting of the Council on Ionizing Radiation Measurements & Standards (CIRMS), NIST, Gaithersburg, MD, March 27-29, 2017. Student **Travel Grant Awards Presentation**.
9. J. Kildea, L. Hendren, D. Herrera, A. Joseph†, R. Maglieri, T. Hijal, *Opal: The oncology portal and application*, Innovate Approaches to Optimal Cancer Care in Canada, Toronto, ON, April 07-08, 2017. Poster presentation.
10. L. Montgomery†, J. Kildea, *Implementation of an in-house radiotherapy incident learning system, compatible with the Canadian national system for incident reporting: Radiation treatment*, Innovate Approaches to Optimal Cancer Care in Canada, Toronto, ON, April 07-08, 2017. Poster presentation.
11. S. Devic*, J. Schneider†, T. Vuong, N. Tomic, R. Lisbona, M. Hickeson, G. Chaussé, F. DeBlois, J. Seuntjens, G. Batist, *Differential uptake volumn histograms as a predictor of response in rectal adenocarcinoma patients with preoperative endorectal brachytherapy*, Annual Meeting of the American Brachytherapy Society (ABS), Boston, MA, April 20-22, 2017.
12. J. DeCunha†*, S. Enger, *Investigation of a new device to improve dosimetric outcomes in intravascular brachytherapy*, Annual Meeting of the American Brachytherapy Society (ABS), Boston, MA, April 20-22, 2017. Poster presentation.
13. G. Famulari†*, J.J. Munro, S. Enger, *Retrospective evaluation of prostate cancer treatment plan quality obtained from intermediate-energy sources for high-dose rate brachytherapy*, Annual Meeting of the American Brachytherapy Society (ABS), Boston, MA, April 20-22, 2017. Oral presentation.
14. G. Famulari†*, S. Enger, *A novel delivery system for high dose rate intensity modulated brachytherapy with intermediate energy radiation sources such as ^{169}Yb* , Annual Meeting of the American Brachytherapy Society (ABS), Boston, MA, April 20-22, 2017. Oral presentation.

15. N. Truong†*, M. Evans, N. Ybarra, S. Enger, *Nuclei size distribution as a predictor of radiosensitivity with Ir 192 brachytherapy*, Annual Meeting of the American Brachytherapy Society (ABS), Boston, MA, April 20-22, 2017. Poster presentation.
16. V. Fortier†*, I. Levesque, *Phase processing for quantitative susceptibility mapping of regions with large susceptibility and lack of signal*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
17. Z. Ahmed†*, I. Levesque, *Robust reference-region DCE-MRI analysis with a vascular component and two-fit analysis*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
18. Z. Ahmed†*, I. Levesque, *Quantitative DCE-MRI analysis using a reference rissue and AIF tail*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
19. E. Alonso-Ortiz†*, I. Levesque, G.B. Pike, *Impact of magnetic susceptibility anisotropy at 3 T and 7 T on T2*-based myelin water fraction imaging*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
20. E. Alonso-Ortiz†*, I. Levesque, G.B. Pike, *Comparison of myelin water fractions from multi-echo spin-echo and multi-gradient echo techniques*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
21. S. Xing†*, I. Levesque, *A probabilistic approach to automated classification of distinct pathological regions in soft tissue sarcoma using diffusion and T2 relaxation*, 25th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, Hawaii, April 22 – 27, 2017. Electronic poster.
22. G. Famulari†*, P. Pater, S. Enger, *Microdosimetric evaluation of intermediate-energy brachytherapy sources using Geant4-DNA*, 36th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), Vienna, Austria, May 04-09, 2017. Oral presentation.
23. J. Kildea*, L. Hendren, D. Herrera, A. Joseph†, R. Maglieri, T. Hijal, *Opal: The oncology portal and application*, 36th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), Vienna, Austria, May 04-09, 2017.
24. M-A. Renaud†*, M. Serban, C. Lambert, J. Seuntjens, *On mixed-modality radiation therapy optimization using the column generation method*, 36th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), Vienna, Austria, May 04-09, 2017. Poster presentation.
25. N. Tomic, P. Papaconstadopoulos, J. Seuntjens, F. DeBlois, S. Devic, *Image quality comparison between two radiotherapy simulators*, 36th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), Vienna, Austria, May 04-09, 2017. (1717P.)
26. G. Almakdessi†, C. Vallhagen Dahlgren, J. Dubeau, S. Enger, R. Maglieri, L. Mirzakhanian†, S. Witharana, J. Kildea, *Secondary electrons around clinical proton beams*, 13th Symposium on Neutron & Ion Dosimetry (NEUDOS13), Krakow, Poland, May 14-19, 2017. Oral presentation.
27. R.B. Richardson*, F. Ali, C. Boyer, C.S. Costello, A. Festarini, I. Gosselin, M.E. Harper, J. Kildea, L.C. Paterson, D. Patten, R. Rogge, M. Stuart, *Re-examination of radiation effects to nuclear and mitochondrial cellular targets from and enhanced thermal neutron flux*, 13th Symposium on Neutron & Ion Dosimetry (NEUDOS13), Krakow, Poland, May 14-19, 2017. Oral presentation.
28. J. Kildea*, C. Angers, B. Liszewski, E. Brown, J. Hunt, M. Milosevic, L. Montgomery†, K. Moran, S. Ross, A. Walker, *Development and refinement of the Canadian national system for incident reporting in radiation treatment (NSIR-RT)*, IAEA International Conference on Advances in Radiation Oncology (ICARO2), Vienna, Austria, June 20-23, 2017. e-poster presentation.
29. P. Watson†*, M. Popovic, J. Seuntjens, *Uncertainties in measuring absorbed dose from a low-energy miniature X-ray source*, IAEA International Conference on Advances in Radiation Oncology (ICARO2), Vienna, Austria, June 20-23, 2017. Accepted.
30. L. Mirzakhanian†*, J. Seuntjens, *Monte Carlo calculated correction factors for nine detectors in Leksell gamma knife perfexion unit*, IAEA International Conference on Advances in Radiation Oncology (ICARO2), Vienna, Austria, June 20-23, 2017. Proffered paper.
31. E. Osunkwor†*, K. Singh, J. Seuntjens, S. Davis, *Characterization of OSLD reproducibility with number of repeated reads*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017.

32. M. Evans*, R. Ruo, C. Hudon, C. Maietta, A. Molineu, H. Mehrens, H. Patrocínio, W. Parker, S. Rossel, *Verification of photon total body irradiation using the IROC-Houston anthropomorphic phantom*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Poster presentation.
33. Y. Zlateva†, J. Seuntjens, *Cherenkov dosimetry via directional Cherenkov-to-dose conversion factors: Monte Carlo protocol and experimental feasibility*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017.
34. G. Famulari†*, M-A. Renaud, S. Enger, *An intensity modulated delivery system for prostate brachytherapy using intermediate energy sources*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation – **Young Investigator Symposium**.
35. J. DeCunha†, S. Enger, *Resolving dosimetric issues in intravascular brachytherapy*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation.
36. A. Diamant†*, M-A Renaud†, J. Seuntjens, *Large scale comparison between AAA and MC-recalculated lung SBRT cases*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Poster presentation.
37. A. Chatterjee†*, M. Vallières†, A. Dohan, I. Levesque, Y. Ueno, V. Bist, S. Saif, C. Reinhold, J. Seuntjens, *Novel methodology for applying radiomics to small datasets*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation; Med. Phys. **44**(8), 4371.
38. D. Breikreutz, M-A. Renaud†, M. Weil, J. Seuntjeuns, M. Bazalova-Carter, *Inverse optimization of low-cost kilovoltage arc therapy plans for breast and lung patients*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. General proffered presentation, oral; Med. Phys. **44**(8), 4387.
39. L. Mirzakhanian†*, H. Benmakhlouf, J. Seuntjens, *Predicting correction factors for reference dosimetry in any phantom material for Leksell gamma knife*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation; Med. Phys. **44**(8), 4390.
40. M-A. Renaud†*, M. Serban, J. Seuntjens, *Mixed modality radiation therapy optimisation using the column generation method*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation; Med. Phys. **44**(8), 4395.
41. J. Mullins†*, F. DeBlois, J. Seuntjens, *VMAT treatment plan optimization using a noncoplanar class solution trajectory applied to cranial targets*, 63rd Annual Meeting of the Canadian Organization of Medical Physicists, Ottawa, ON, July 12-15, 2017. Oral presentation; Med. Phys. **44**(8), 4396.
42. E. Osunkwor†*, K. Singh, J. Seuntjens, S. Davis, *Characterization of optically stimulated luminescence dosimeter supralinearity with respect to prior dose history*, 59th Annual Meeting of the American Association of Physicists in Medicine, Denver, CO, July 30-August 03, 2017.
43. J. Schneider†*, R. Lisbona, M. Hickeson, G. Chaussé, N. Tomic, T. Vuong, F. DeBlois, J. Seuntjens, S. Devic, *FDG-PET background definition with the use of differential uptake volume histograms for rectal cancer patients*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. TH-AB-FS4-3.
44. N. Tomic*, P. Papaconstadopoulos, J. Seuntjens, F. DeBlois, S. Devic, *Comparison of image quality between RT CT simulators*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 3, 2017. TU-C2-GePD-I-2.
45. P. Papaconstadopoulos*, N. Tomic, H. Bekerat, P. Watson†, E. Mainegra-Hing, F. DeBlois, J. Seuntjens, S. Devic, *Beam quality variations within a CTDI phantom for the energy range 100 to 140 KVP*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. MO-RAM-GePD-I-2.
46. G. Famulari†*, S. Enger, *Cluster pattern analysis for alternative high dose rate brachytherapy sources ⁷⁵Se, ¹⁶⁹Yb, and ¹⁵³Gd*, 59th Annual Meeting & Exhibition American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. ePoster presentation.
47. G. Almkaddesi†*, J. Kildea, *Secondary electrons from clinical proton beams*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017.
48. M-A. Renaud†*, M. Serban, J. Seuntjens, *Mixed-modality radiation therapy optimization using the column generation method*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. Oral presentation TH-CD-708-7.

49. S. Hickling†*, M. Hobson, M-A. Renaud†, I. El Naqa, *In vivo detection of radiation-induced acoustic waves for treatment delivery verification: A simulation study*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. Oral presentation.
50. A. Toltz†*, M. Hoesl, J. Schuemann, J. Seuntjens, H. Lu, H. Paganetti, *In vivo proton therapy range verification using time-resolved diode dosimetry: Validation through numerical modeling*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. Oral presentation.
51. Y. Zlateva†*, J. Seuntjens, I. El Naqa, *Cherenkov dosimetry via stopping-to-Cherenkov power ratios: Protocol and experimental feasibility*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. Oral presentation.
52. J. DeCunha, S. Enger, *Monte Carlo evaluation of dose perturbations in intravascular brachytherapy*, 59th Annual Meeting of the American Association of Physicists in Medicine (AAPM), Denver, Colorado, July 30-August 03, 2017. Poster presentation.
53. G. Famulari†, S. Enger, *IMBrachy: A novel intensity modulated brachytherapy delivery system using 169Yb*, 59th Annual Meeting of the American Society for Radiation Oncology (ASTRO), September 24-27, 2017, San Diego, California. Poster presentation.
54. M. Serban, C. Kirisits, K. Nkiwane, I. Dumas, J. Swamidias, A. De Leeuw, R. Hudej, G. Lowe, R. Potter, J. Lindegaard, K. Tanderup, *Irradiated volumes in image guided adaptive brachytherapy in cervix cancer: Results from the EMBRACE study*, 59th Annual Meeting of the American Society for Radiation Oncology (ASTRO), September 24-27, 2017, San Diego, California. Oral presentation.
55. G. Famulari†*, P. Pater, S. Enger, *Microdosimetry calculations for monoenergetic electrons using Geant4-DNA combined with a weighted track sampling algorithm*, International Conference on Monte Carlo Techniques for Medical Applications (MCMA), October 15-18, 2017.
56. G. Famulari†*, E. Soisson, M. Duclos, S. Enger, *Consequences of patient heterogeneities for intermediate-energy sources in post-implant assessment of prostate brachytherapy treatment plans*, International Conference on Monte Carlo Techniques for Medical Applications (MCMA), October 15-18, 2017.
57. Z. Ahmed†*, I. Levesque, *Advancing the reference region model for DCE-MRI*, Cancer Research Program Research Day, Research Institute-McGill University Health Centre, Montréal, QC, October 27, 2017. Poster presentation.
58. S. Xing†*, C.R. Freeman, S. Jung, I. Levesque, *A probabilistic approach to automated classification of distinct pathological regions in soft tissue sarcoma using diffusion and T2 relaxation*, Cancer Research Program Research Day, Research Institute-McGill University Health Centre, Montréal, QC, October 27, 2017. Poster presentation.
59. J. Kildea*, L. Hendren, T. Hijal, *Opal: The oncology portal and application*, Canadian Cancer Research Conference, Vancouver, BC, November 05-07, 2017.
60. Z. Ahmed†*, *Robust mapping of tumor perfusion with the reference region model and DCE-MRI*, Congrès de l'Association Québécoise des Physiens Médicaux Cliniques, Trois-Rivières, QC, November 18, 2017. Oral presentation.
61. J. Mégrouèche†, V. Fortier†, M. Simard†, T. Rosin, A. di Lena, I. Levesque, *Automatisation des tests de contrôle de la qualité en imagerie par resonance magnétique*, Congrès de l'Association Québécoise des Physiens Médicaux Cliniquesm Trois-Rivières, QC, November 18, 2017. Oral presentation.
62. A. Joseph†*, L. Hendren, T. Hijal, J. Kildea, *Predicting waiting times in radiation oncology using machine learning*, 16th IEEE International Conference on Machine Learning & Applications (ICMLA), Cancun, Mexico, December 18-21, 2017. Poster presentation.