PhD Physics Degrees Awarded in Canadian Universities / Doctorats en physique décernés par les universités canadiennes

January 1 2023 to December 31 2023 / 1er Janvier 2023 au 31 Décembre 2023

CONCORDIA UNIVERSITY

HUCK, J., “The Cerebral Venous Network: deoxyhemoglobin as contrast, bias and quantitative biomarker in magnetic resonance imaging”, (C. Gauthier), June 2023, postdoctoral fellow at Universite de Sherbrooke, Sherbrooke, QC, Canada.

RAZAVIPOUR, F. “Metabolic and Blood Flow Properties of Functional Brain Networks using Human Multimodal Neuroimaging” (C. Grova, C. Gauthier), June 2023.

McGILL UNIVERSITY

AHMED, W., "Search for a bosonic decay of a charged Higgs at the LHC with the ATLAS detector", (R. Steele), Winter 2023.

AL KHARUSI, S., "Development of a water Cherenkov muon veto for the nEXO neutrinoless double beta decay experiment", (T. Brunner, D. Haggard), Fall 2023.

BHARDWAJ, M., "Deciphering the Origins of FRBs Using Local Universe CHIME/FRB Discoveries", (V. Kaspi), Winter 2023.

BOYCE, H., "Observational probes of supermassive black hole environments: from the event horizon to the sphere of influence", (Haggard), Fall 2022.

BURNS, D., "Timescale coupling phenomena with hydrodynamics phase field crystal models: The atomic scale shuffle", (N. Provatas, M. Grant), Fall 2023.

CHURCHILL, J., "Electromagnetic radiation from various stages of relativistic heavy-ion collisions", (C. Gale), Fall 2022.

COWIE, M., "Charge re-organization timescales and loss tangents at semiconductor surfaces measured by nc-AFM", (P. Grutter), Summer 2023.
ENGSTRÖM, L., "Combining spin-orbit coupling and multi-orbital interactions: a recipe for novel magnetism and superconductivity", (T. Pereg-Barnea, W. Witczak-Krempa), Summer 2023.

FRICK, M., "Improvements to the thermodynamic and kinetic consistency of the Phase Field Crystal model", (N. Provatas), Winter 2023.

FUENTES, R., "Hydrodynamics of convection with composition gradients: Salty water and Jupiter", (A. Cumming), Fall 2022.

GAMBINI, G., "A dark matter candidate in the context of physics beyond the standard model", (J. Cline), Fall 2022.

HEFFERNAN, M., "Quantification of the Quark-Gluon Plasma with statistical learning", (C. Gale), Fall 2022.

JREIDINI, P., "Novel developments in phase-field crystal modeling for the solidification of complex materials", (N. Provatas), Fall 2022.

JUTRAS-DUBÉ, L., "Geometric models of embryonic pattern formation and of genetic oscillator synchronization", (P. Francois), Fall 2022.

LI, Y., "Holographic conformal field theories and their flat-space structures", (S. Caron-Huot), Summer 2023.

LI, Z., "Search for a fermiophobic charged Higgs boson in proton-proton collisions with the ATLAS detector", (F. Corriveau, A. Warburton), Fall 2023.

LIU, Z., "Spatial organization and dynamics of multiple DNA molecules confined in a nanofluidic cavity", (W. Reisner), Winter 2023.

MATTE, D., "Ultrafast electron cold field emission from a tungsten nanotip by single cycle THz pulse", (D. Cooke), Fall 2022.

MCGOWAN, J., "Measurement of the electroweak production of a Photon and a W Boson in association with two jets using the ATLAS Detector", (B. Vachon), Fall 2023.

MENDES SILVA, M., "Nuclear equations of state, superfluidity models and cold neutron star observations", (C.Gale, A. Cumming), Summer 2023.

MODARRESI-YAZDI, R., "Comparative studies of jet quenching in relativistic heavy ion collisions", (C. Gale), Summer 2023.

MURRAY, K., "Design and commissioning of a multi-reflection time-of-flight mass-spectrometer for Barium tagging with nEXO", (T. Brunner), Winter 2023.

NASERI, H., "The use of radiomics and natural language processing to detect pain in the simulation-CT images of patients undergoing radiotherapy for bone metastasis", (J. Kildea), Winter 2023.

PAGANO, M., "From mitigating systematics to theoretical interpretation of the 21cm signal during the epoch of reionization", (A. Liu), Winter 2023.

PROULX-GIRALDEAU, F., "Guided by evolution: biophysical mechanisms of homeostasis, control and adaptation in cells", (P. Francois), Winter 2023.

PUEL, M., "Topics beyond the standard cosmological model", (J. Cline), Fall 2023.

SAHA, S., "Search for a new light particle produced in association with a top quark pair with the ATLAS Detector", (S. Robertson), Fall 2022.

SOLYOM, A., "Spin-orbit torque control of nanomagnetic devices probed by nitrogen-vacancy centres in diamond", (L. Childress, J. Childress), Summer 2023.

WAKELING, H., "A measurement of the denominators of R(D(*)) with 189 inverse femtobarns of Belle II data", (S. Robertson), Winter 2023.

ZAHRAEE, Z., "Analytical Bootstrap of Conformal Field Theory", (S. Caron-Huot), Fall 2023.

ZENG, L., "Organization, Mixing, and Demixing of Semiflexible Polymer Chains in Nanochannels Under Nonequilibrium Compression", (W. Reisner), Fall 2023.

McMASTER UNIVERSITY

SHARMA, S., "Study of unconventional superconductors and breathing pyrochlore magnets", (G. Luke), November 2023, Postdoctoral Fellow at the University of Minnesota, USA.

SMITH, E., "The Dipole-Octupole Quantum Spin Ice Candidate $Ce_2Zr_2O_7$", (B. Gaulin), November 2023, Postdoctoral Fellow at ETH, Zurich, Switzerland.

QUEEN'S UNIVERSITY

ABOELHASSAN, S., "On Maximal Extensions of the Vaidya Metric", (K. Lake), April 2023, Assistant Professor of Mathematics at University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada.

ALLEN, T., "Shedding Light on Laser-Metal Interactions: *In situ* Monitoring with Inline Coherent Imaging and Integrating Sphere Radiometry", (J. Fraser), November 2023, Optical Scientist at Light Machinery, Nepean, ON, Canada.

FASCIONE, E., "Searching for Electron-Interacting Dark Matter with the Super Cryogenic Dark Matter Search", (W. Rau), August 2023, Postdoctoral Fellow at the University of Heidelberg, Heidelberg, Germany.

FRIEDLANDER, A., "Black Holes to Dark Matter and Back Again", (A. Vincent), July 2023, Geomatics Data Analyst and Developer at Ministry of the Environment, Conservation and Parks, Toronto, Ontario, Canada.

GERMOND, R., "Techniques and Challenges in Low-Mass Dark Matter Searches Using CDMS Style Detectors", (W. Rau), February 2023Postdoctoral fellow at Institute for Quantum Computing (IQC) of the University of Waterloo, Waterloo, Ontario, Canada.

LEBEDEV, D., "General Expressions for Measurable Geometric and Kinematic Quantities in Curved Spacetime", (K. Lake), August 2023, Term Adjunct at Queen's University, Kingston ON, Canada.

POUSHIMIN, R., "From Surface Plasmon Resonance to Hot Electron Emission: Pioneering Next-Generation of Enhanced Photodetection", (J.-M. Nunzi), September 2023, Optical Engineer at VIAVI Solutions, Ottawa, ON, Canada.

SEMENEC, I., "The Geoneutrino Signal in the SNO+ Experiment", (M. Chen), November 2023.

SIMMONS, J., "Using Quadrature and Collocation Methods to Calculate Spectra of Polyatomic Molecules with General Potential Energy Surfaces", (T. Carrington), April 2023.

TAM, B., "Enabling Neutrinoless Double Beta Decay in the SNO+ Experiment Through the Deployment and Study of Liquid Scintillator", (M. Chen), August 2023, Newton Fellow (postdoc) at University of Oxford, Oxford, UK.

WANG, D., "Light Emission and Charge Transport in Reverse-biased Polymer Junctions", (J. Gao), September 2023, Senior Process Engineer at Advanced Micro-Fabrication Equipment Inc., Shanghai, China.

WINDELER, M., "High-Average-Power Optical Parametric Chirped Pulse Amplification Development for the Linac Coherent Light Source II", (J. Fraser), November 2023, Educator, Halifax, NS, Canada.

SIMON FRASER UNIVERSITY

BLABER, S., "Energetically Efficient Control of Stochastic Thermodynamic Systems", (D. Sivak), June 2023, Postdoctoral Fellow with Professor Joerg Rottler at the University of British Columbia, Vancouver, British Columbia, Canada.

JAGER, B., "Precision Measurements of Higgs Boson Production in Decays to W Bosons using Machine Learning with the ATLAS Experiment", (B. Stelzer), June 2023.

LEE, J., "Exploring the magnetism of the 4f-based intermetallic compounds on geometrically frustrated lattices", (E. Mun), October 2023, manager at A.TECH Software Company in Ulsan, South Korea.

MANDAL, S., "Superconductivity of triple-point fermions", (I. Herbut), June 2023, Postdoctoral Researcher with Professor Matthias Scheurer at the Department of Physics, University of Stuttgart in Baden-Wurtenberg, Germany.

NARAYANAN, S., "Chiral Symmetry Breaking in the Fractional Quantum Hall Effect in Graphene", (M. Kennett), October 2023.

SIDHU, S., "Improving the statistical sensitivity reach, of the TUCAN neutron electric dipole moment experiment", (J. Sonier, R. Picker).

TORONTO METROPOLITAN UNIVERSITY

BASHARAT, F., "Low-dose, X-ray-based Imaging of Lung Function", (J. Tanguay), June 2023, Medical Physics Resident at Cancer Centre of Southeastern Ontario, Kingston, Ontario, Canada.

D'SOUZA, M., "Advancements in Water Calorimetry Design and Techniques, and Applications to Modern Radiotherapy", (A. Sarfehnia, C. Kumaradas), October 2023, Medical Physics Resident at Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada.

HORNSBY, T., "Ultrasound Activation of Nanodrug Carriers Functionalized with Anticancer Drugs: Modelling and Measurements", (J. Tavakkoli), October 2023, Radiation Oncology Physics Resident at McGill University (St. Peter's Health Partners), Montreal, Quebec, Canada.

MONJAZEBI, D., "Phase Aberration Estimation in Synthetic Transmit Aperture Ultrasound Imaging and Its Application to Estimating Sound Speed", (Y. Xu), June 2023, Data Scientist at Shopify, Toronto, Ontario, Canada.

QUIROUETTE, C., "Impact of the discrete, stochastic nature of cell-virus interactions on the likelihood of infection establishment, interpretations of experimental infectivity measurements, and parameter estimation from such measurements", (C. Beauchemin), June 2023, Research Scientist at Wyatt AI, Montreal, Quebec, Canada.

ZALLOUM, I., "On the fine-tuning of the size and resonance frequency of microfluidically-generated monodisperse microbubbles", (R. Karshafian, S. Tsai), June 2023.

UNIVERSITÉ DE MONTRÉAL

BÉDARD, A., « Caractérisation et modélisation de l'évolution spectrale des étoiles naines blanches chaudes », (P. Bergeron, P. Brassard), March 2023, postdoctoral fellow at the University of Warwick, Coventry, UK.

BOUCHER, A., « Caractérisation de l'atmosphères des exoplanètes par spectroscopie de transit à haute dispersion avec SPIRou », (D. Lafrenière), March 2023, Scientist (physics) at Environment and Climate Change Canada, Dorval, Qc, Canada.

BROUSSEAU-COUTURE, V., « Étude de la dépendance en température de la structure électronique à l'aide de la théorie de la fonctionnelle de la densité : effets non adiabatiques, dilatation du point zéro, couplage spin-orbite et application aux transitions de phase topologiques », (M. Côté), March 2023, Scientist, physical sciences - research Air quality policy-issue response section at Canadian Meteorological Center Environment and Climate Change Canada, Dorval, Québec, Canada.

CACOT, L., « Couplage d'une décharge à barrière diélectrique avec un aérosol pour le dépôt de couches minces (multi)fonctionnelles : rôle de l'injection pulsée de précurseurs », (L. Stafford, N. Naudé), March 2023, Coordonnatrice principale, Bureau Recherche Développement Valorisation (BRDV) - Direction générale et administration à l'Université de Montréal, Montréal, Québec, Canada.

DARVEAU-BERNIER, A., « Caractérisation d'atmosphères d'exoplanètes à haute résolution à l'aide de l'instrument SPIRou et développement de méthodes d'extraction spectrophotométriques pour le télescope spatial James Webb », (R. Doyon, D. Lafrenière), May 2023, Scientist (physics) at Environment and Climate Change Canada, Montréal, QC, Canada.

DUCHAINE, J., « Modélisation Monte Carlo du CyberKnife M6 et ses applications à la dosimétrie de petits champs de radiothérapie », H. Bouchard March 2023, Project Analyst at Quick Release, Coventry, Warwickshire, UK.

HARDY, F., « Observations, modélisation, évolution et origines des naines blanches magnétiques », (P. Dufour), March 2023, Scientifique de données au Centre de recherche du CHUM, Montréal, QC, Canada.

PAPADATOS, C., "Advances in Calibration and Tracking Techniques for Pixelated Si Timepix3 Detectors", (C. Leroy), September 2023, Professeur de physique au CEGEP Vanier, Montréal, Qc. Canada.

RAHMAN, MD. M., "Modeling and numerical study of the diffusion of point defects in α−iron", (N. Mousseau), June 2023, postdoctoral fellow at Polytechnique Montréal, Montréal, Québec, Canada.

REMY, C., « Contrôle en temps réel de la précision du suivi indirect de tumeurs mobiles en radiothérapie », (H. Bouchard), March 2023, Systems designer/ ingénieure systèmes à Zimmer Biomet, Montréal, QC, Canada.

UNIVERSITÉ DE SHERBROOKE

ABBASI ESKANDARI, M., "Magnetic properties of oxide heterostructures for magnetic cooling systems and spintronics", (P. Fournier), Mai 2023, Postdoctoral Researcher at McGill Université, Montreal, Québec, Canada.

DÉSOPPI, L., « Groupe de renormalisation fonctionnel pour systèmes fermioniques unidimensionnels sur réseau appliqué au modèle de Fermi-Hubbard étendu », (C. Bourbonnais), Décembre 2023, Chercheur posdoctoral, Université de Sherbrooke, Sherbrooke, Québec, Canada.

GAUVIN-NDIAYE, C.-A., « L'approche autocohérente à deux particules: cuprates dopés en électrons et améliorations de la méthode », (A.-M. Tremblay), Novembre 2023, Leader de l'équipe théorique, Nord Quantique, Sherbrooke, QC, Canada.

KRIEKOUKI, I., « Approche industrielle aux boîtes quantiques dans des dispositifs de silicium sur isolant complètement déplété pour applications en information quantique », (M. Pioro-Ladrière), Décembre 2022.

LEFRANÇOIS, É., « Étude du transport thermique dans l'isolant magnétique α-RuCl3 : candidat de liquide de spins quantique Kitaev », (L. Taillefer), Juillet 2023, Coordonnateur de la formation, Institut Quantique, Université de Sherbrooke, Québec, Canada.

ROHRBACHER, C., « Dispositifs de spin sur plateforme silicium de 300 mm et intégration cryo-CMOS pour la mise à l'échelle des qubits de spin », (E. Dupont-Ferrier), Novembre 2023, Senior Experimental Quantum Physicist, Université de Sherbrooke, Sherbrooke, QC, Canada.

SHILLITO, R., "Simulation and optimisation of superconducting Qubit control and readout", A. Blais, Septembre 2023, Theoretical Physicist at Nord Quantique, Sherbrooke, Québec, Canada.

UNIVERSITÉ LAVAL

BÉLANGER, C., "Next generation of optimization and interactive planning algorithms for brachytherapy treatments", (L. Beaulieu), Décembre 2023, Software Engineer Algorithm Development, Elekta Brachy, Veenendaal, The Netherlands.

CHANTREL, P-E., « Amplification d'un signal à 10 µm par pompage optique du CO_2 utilisé comme milieu de gain », (B. Witzel, M. Piché), Octobre 2023, Software Developer, Toronto.

COLMENARES CALDERON, Y.N., "Exploring As-Se Based Chalcogenide Thin Films for the Fabrication of Micro-Optical Components", (Y.Messaddeq), Avril 2023, Postdoctoral fellow at ULaval at the Chemistry department.

DE TILLIEUX, L.P., « Développement d'une sonde de spectroscopie de réflectance diffuse résolue spatialement pour la caractérisation de tissus épithéliaux », (P. Marquet), Septembre 2023, Optronics expert, Nüvü Caméras Inc.

GAUTHIER, J-C., « Conversion de lumière dans l'infrarouge-moyen par amplification fibrée », (R. Vallée), Février 2023, Director - Operations, comm. & industry promo. at Optonique, Québec, Canada.

JOBIN, F., « Développement de lasers impulsionnels à fibre dopée au dysprosium », (R. Vallée, M. Bernier), Octobre 2023, Research scientist, ABB, Québec, Canada.

KASSIMI, Y., « Source infrarouge accordable de haute énergie pour le pompage optique d'un amplificateur CO_2 à 10 microns », (B. Witzel, M. Piché), Octobre 2023, Senior Functional Developer at Equisoft.

KROSHKO, A., « L'analyse de frontières stochastiques appliquée à la prédiction dosimétrique pour la planification de traitement en radiothérapie externe », (L. Archambault), Décembre 2023, Medical Physicist, Centre Intégré de santé et des services sociaux du Bas-Saint-Laurent, Rimouski, Quebec.

LEBEL-CORMIER, M-A., « Conception d'une nouvelle génération de calorimètres multi-point utilisant une fibre optique à réseaux de Bragg pour la dosimétrie en radiothérapie », (L. Beaulieu, M. Bernier), Décembre 2023, Medical Physicist, Centre Intégré de santé et des services sociaux du Bas-Saint-Laurent, Rimouski, Quebec.

PARADIS, P., « Développement de lasers impulsionnels tout-fibre pour la spectroscopie dans l'infrarouge moyen », (M. Bernier, R. Vallée), Juillet 2023, Postdoctoral researcher at LumIR Lasers, Québec, Canada.

PELCHAT-VOYER, S., « Optimisation de l'accélération directe d'électrons par une impulsion laser avec un déphasage de Gouy ajustable », (M. Piché), Mars 2023, Spécialiste en imagerie hyperspectrale et télédétection, Flyscan Systems Inc.

TAYAMA, G., "Development of aluminum-phosphate hybrid materials via sol-gel route for additive manufacturing of photonic materials", (T. Galstien, Y. Messaddeq), Octobre 2023, Postdoctoral fellow at ULaval in the Physics Department.

THO, D., « Suivi électromagnétique en curiethérapie à haut débit de dose: performance et rôle de la technologie », (L. Beaulieu), Février 2023, Postdoctoral fellow at MD Andersen Cancer Center, Houston, Texas.

UNIVERSITY OF ALBERTA

BIN AKBER ALI, A., "Searches for Magnetic Monopoles and Highly Ionising Particles at $\sqrt{s}$ = 13 TeV at the LHC with MoEDAL", (J. Pinfold, M. de Montigny), November 2023, Research Fellow for CNRS (French National Centre for Scientific Research), Singapore.

BOROWIECKI, R., "Improved spectral estimates of climate oscillations in the Quaternary and Neogene", (V. Kravchinsky, M. van der Baan), June 2023, Field Geophysicist, ConeTec Investigations Ltd., Edmonton, AB, Canada.

BRUULSEMA, C., "Theory and Application of Thomson Scattering to Particle Transport and Magnetic Field Measurements in Laser-Produced Plasmas", (W. Rozmus), June 2023, Postdoctoral fellow, National Ignition Facility, Lawrence Livermore National Laboratory, Livermore, CA, USA.

FAHLMAN, S., "You Must Construct Additional Hypermassive Neutron Stars", (R. Fernández Munoz), November 2023, Forecasting and Analytics Specialist, Capital Power, Edmonton, AB, Canada.

HANNESON, C., "Geothermal Exploration and Tectonic Studies in Southwestern Canada Using the Magnetotelluric Method", (M. Unsworth), November 2023, Geophysicist, SJ Geophysics, Vancouver, BC, Canada.

MODI, S., "Higgs Boson Production in Gluon Fusion through the Next-to-Next-to-Leading Power in Quark Mass", (A. Penin), November 2023, Visiting Assistant Professor, Stetson University, DeLand, Florida, USA.

OKWOLI, E., "Comparison and Prediction of High-Resolution Probe Screening Measurements on Rock Cores", (D. Potter), November 2023, Data Warehouse Analyst, Edmonton Public Library, Edmonton, AB, Canada.

SAFARABADI FARAHANI, S., "A Search for Dark Matter Interactions in the DEAP 3600 Detector Using Fiducial Masses Ranging from 1433 to 2966 kg", (A. Hallin), November 2023, Data Analyst, Zero Point Cryogenics, Edmonton, AB, Canada.

SARKAR, S., "Search for TeV-Scale Neutrino Dimuon Events with 10.7 Years of IceCube Data", (R. Moore), November 2023, Astronomical Software Developer, Dept. Physics, University of Alberta, Edmonton, AB Canada.

UNIVERSITY OF BRITISH COLUMBIA

BEVINGTON, C.W.J., "Development of advanced denoising and analysis algorithms for applications in hybrid PET/MRI brain imaging", (V. Sossi), November 2023, Postdoctoral Research Fellow at University of British Columbia, Vancouver, BC, Canada and Class IV Flight Instructor at Principal Air, Abbotsford, BC, Canada.

DVORAK, A., “Advances in Quantitative Magnetic Resonance Imaging of Myelin”, (S. Kolind), May 2023, Founder and CEO at InForm Imaging, Vancouver, BC, Canada.

FOMICHEV, S., "Electron-phonon coupling in insulators: beyond the Migdal limit", (M. Berciu), November 2023, Quantum Scientist at Xanadu Quantum Technologies Inc., Toronto, Ontario, Canada.

GARG, P., "Biophysics of Disease and Evolution: Molecules to Organisms", (S. Plotkin), May 2023, Research Programmer at Canada's Michael Smith Genome Sciences Centre, Vancouver, BC, Canada.

GYSBERS, P., "Radiative Capture and Decays in Ab Initio Nuclear Theory" (P. Navratil, R. Kruecken), May 2023, Research Associate at the Facility for Rare Isotope Beams, Michigan State University, East Lansing, MI, USA.

HAENEL, R., “Collective modes of the superconducting condensate”, (M. Franz, D. Manske, M. Daghofer), November 2023, Quantum Software Engineer at Photonic Inc, Coquitlam, BC, Canada.

HUANG, Y., "Dynamics of transneptunian objects under the influence of a rogue planet", (B. Gladman), November 2023, Project Research Fellow at National Astronomical Observatory of Japan, Mitaka, Tokyo, Japan.

MORRIS, S.R., "Magnetic resonance imaging to measure myelin: orientation dependence and application to spinal cord injury", (C. Laule), May 2023, Medical Physics resident in Radiation Oncology at NYU Langone Health, New York City, NY, USA.

NEWHOUSE, R., “Using displaced tracks to search for sterile neutrinos in the ATLAS detector”, (A. Lister), May 2023, Software Engineer at Amazon Web Services, Vancouver, BC, Canada.

PARADA TORRES, J., "Red giant stars as standard candles", (H. Richer), May 2023.

PINSONNEAULT-MAROTTE, T., "A Detection of Cosmological 21 cm Emission from CHIME in Cross-correlation with the eBOSS Lyman-α Forest", (G. Hinshaw), November 2023, Postdoctoral fellow, Stanford University/Kavli Institute for Particle Astrophysics and Cosmology (KIPAC).

RIPOCHE, P., "Studies of evolved stellar populations: from giants to remnants", (J. Heyl), November 2023.

SAITO, Y., "Development of statistical tools for studies of the rapid neutron capture process", (R. Kruecken), May 2023, Postdoctoral Fellow at the University of Notre Dame, IN, USA.

SHIN, H., "Study of 4+ and 3+ titanate oxide thin films grown by molecular beam epitaxy", (K. Zou), May 2023, Senior Materials Scientist at PsiQuantum, Palo Alto, CA, USA.

TUMMURU, T., "Topological superconductivity in twisted 2D structures", (M. Franz), May 2023, Scientist at Hitachi Energy, Zürich, Switzerland.

WADDELL, C., "Boundaries, Braneworlds, and Black Holes: Applications of the AdS/BCFT Correspondence", (M. Van Raamsdonk), November 2023, Postdoctoral Fellow at the Perimeter Institute, Waterloo, Ontario, Canada.

WANG, R., "Relaxation Dynamics in a Molecular Ultracold Plasma Control and Modeling", (E. Grant), November 2023, Postdoctoral Fellow at Quantum Valley Ideas Lab, Waterloo, ON, Canada.

YAN, X., "Towards Scalable Quantum Silicon Photonics with Spin Qubits", (J. Young), May 2023, Senior Photonic Engineer II at Xanadu Quantum Technologies, Toronto, ON, Canada.

UNIVERSITY OF CALGARY

ESTEKI, K., "Thermo-electro-optical properties of disordered nanowire networks", (C. Gomes da Rocha), November 2023.

FREDERICK, R., "Advances in Total Body Irradiation Treatment: Improving Standardization and Efficiency", (G. Pierce), November 2023, Medical Physicist at Alberta Health Services, Calgary, Alberta, Canada.

JI, J., "Novel approaches towards non-cryogenic quantum repeaters", (C. Simon), May 2023.

KARUVADE, S., "Power and Certifiability of Quantum Computing for Open Systems", (B. Sanders), February 2023.

MANN, T., "Development and Clinical Implementation of Applications for Guiding Linac-based Stereotactic Radiosurgery Planning", (K. Thind), November 2023.

MOHANDESI, A., "Characteristics of Topside Equatorial Ionospheric Irregularities: An Investigation Using Swarm Echo Measurements", (D. Knudsen), November 2023.

RANASINGHE, S., "Radio Study of Supernova Remnants: Understanding the Missing Supernova Remnant Problem", (D. Leahy), November 2023.

REITER, K., "Auroral Zone Geomagnetic Activity and Space Weather Implications", (J. Brown), November 2023.

SAXENA, G., "Manipulation of dynamical resources in quantum information theory", (G. Gour), May 2023.

SHANDILYA, P., "Optomechanical Spin-Photon Interface in Wide-Band Gap Materials", (P. Barclay), May 2023.

VAN ELBURG, D., "Three-Dimensional Transvaginal Ultrasound for Intracavitary and Interstitial Gynecologic High-Dose-Rate Brachytherapy", (T. Meyer), November 2023.

UNIVERSITY OF GUELPH

BIDAMAN, H., "Lifetime Analysis of 100Zr and Simulating the Detector Array for Energy Measurements of Neutrons (DAEMON)", (P. Garrett), June 2023, Detector Product Engineer at Redlen Technologies Inc, Saanichton, British Columbia, Canada.

BURACZYNSKI, M., "Impurities and Inhomogeneities in Neutron Matter", (A. Gezerlis), February 2023, Quantitative Analyst at Deloitte, Oakville, Ontario, Canada.

KASANDA, E., "A Novel Method of Sub-milimeter Range Verification for Hadron Therapy using a Tumour Marker", (C. Svensson), June 2023, Postdoctoral Fellow at University of Bern, Bern, Switzerland.

NASROLLAHZADEH, F., "Structuring Plant-Based Foods Using Less Refined Plant Proteins and High Moisture Extrusion", (M. Martinez, J. Dutcher), June 2023.

PALKANOGLOU, G., "Pairing in nuclear and cold atomic systems", (A. Gezerlis), October 2023, Postdoctoral Research Associate at TRIUMF, Vancouver, British Columbia, Canada.

RADICH, A., "^{124}Xe Angular Correlation Analysis and Development of the Detector Array for Energy Measurements Of Neutrons (DAEMON)", (P. Garrett), February 2023, Neutron Scientist at General Fusion, Cambridge, Ontario, Canada.

SALIMINASAB. M., "A Membrane Photosensor Related to Proteorhodopsin with Unique Motifs for Signal Transduction", (L. Brown), October 2023, Postdoctoral Fellow at University of Toronto, Ontario, Canada.

XIAO, P., "Towards Understanding Membrane Protein Folding and Stability", (V. Ladizhansky, L. Brown), October 2023, Postdoctoral Research Associate at Michigan State University, East Lansing, MI, United States.

UNIVERSITY OF OTTAWA / UNIVERSITÉ D'OTTAWA

COUTURE, N., "Enhancing time-resolved THz systems through the integration of optical fibers", (J.-M. Ménard), November 2023, Research Scientist, Ciena, Ottawa, ON, Canada.

DUBE, Z., "Photoelectron spectroscopy using a synthetically chiral laser pulse", (A. Staudte), May 2023, Senior Research Technician, King's College London, UK.

GODFREY, A. "Blister Formation Using Ultrafast Laser Pulses", (P. Corkum), February 2023, Senior Optical System Designer, Ciena, Ottawa.

HOGAN, R., "Manipulating beam propagation in slow-light media", (R. Boyd), September 2023, Postdoctoral Fellow in the Liu Hui Group at Nanjing University in Nanjing, China.

LAFERRIERE, P., "Quantum Optical Properties of Nanowire Quantum Dots", (D. Dalacu), January 2023, Postdoctoral Fellow at Carleton University, Ottawa.

LEBLANC LATOUR, M., "Cellulose biomaterials for bone tissue engineering", (A. Pelling), January 2023, CEO and co-founder of Sugar Coated Technologies Inc.

LEMIEUX, S., "Applications of high-gain parametric down-conversion to metrology", (R. Boyd), March 2023, Defense Scientist in Electro-optic Surveillance and Reconnaissance at Defence Research and Development Canada.

MANALO, J., "Computational methods for designing semiconductor quantum dot devices", (P. Hawrylak), September 2023, Postdoctoral Fellow at University of Windsor.

SALEEM, Y., "Electronic and Optical Properties of 2D Materials", (P. Hawrylak), April 2023, Postdoctoral Fellow at TU Dortmund, Germany.

SIT, A., "The Physics of Spatially Twisted Nematic Liquid Crystals", (E. Karimi), October 2023, Research Associate, National Research Council, Ottawa.

TAVAKOLI, S.K., "Dynamical Complexity of Nonlinear Dynamical Systems with Multiple Delays", (A. Longtin), September 2023, Postdoctoral Fellow at the University of Ottawa.

WANG, H., "Stimulated Brillouin scattering in chalcogenide microfiber sensors and random fiber lasers", (X. Bao), February 2023, Associate Professor, North University of China.

UNIVERSITY OF SASKATCHEWAN

BAUER, R., "Probing Matter with Photons, Electrons and Neutrons: A Study of Water and Flax", (J. Tse, GS Chang), June 2024, Research Associate at Zentrum fur Wasserforschung Freiberg, Freiberg, Hamburg.

BRAUN, P., "Investing Local Interactions of Transition Metal Ions in Correlated Materials", (A. Moewes, R. Green), June 2023, Associate Scientist at Canadian Light Source, Saskatoon, SK, Canada.

deOLIVEIRA, T., "Heavy-Light and Doubly-Strange Diquark Spectrum from QCD Laplace Sum-Rules and Diagrammatic Renormalization Methods", (T. Steele), October 2023, physics instructor at a Canadian University.

ELCOCK, W., "Characterization of Ion Implanted Materials for Photonic Applications: Radiation Damage in Tellurium Dioxide and Silicon LEDs", (M. Bradley, GS Chang), June 2024, research analyst at Environmental Materials Science (EMS) Inc, Saskatoon SK, Canada.

MORENO, J., "Characterization of an Inductively-Coupled Plasma Immersion Ion Implanted System", (L. Couedel, M. Bradley), June 2023, Isotope Production Scientist for TMC2 Manufacturing Company, North Vancouver, BC, Canada.

TAVASSOLI, A., "Drift Instabilities, Anomalous Transport, and Heating in Low-temperature Plasmas", (A. Smolyakov), June 2023, Postdoctoral fellow at Australian National University, Canberra Australia.

ZHEN, P., "First Principles Studies of Structure-Carcinogenicity Relationship", (GS Chang), June 2024.

UNIVERSITY OF TORONTO

AUDETTE, A., "Physical Mechanisms Behind the Midlatitude Atmospheric Energy Transport Response to Imposed Arctic Sea Ice Loss.", (P.J. Kushner), November 2023, Postdoctoral Fellow at the University of California in Santa Cruz, U.S.A.

BAKER, D., "Understanding Pulsar Scintillation with the Power of Straight Lines.", (U.-L. Pen), March 2023, postdoctoral fellow at Academia Sinica Institute of Astronomy and Astrophysics, Taipei, Taiwan.

BARRON, J.P.O., "New Probes of Hidden Sectors: From Colliders to Cosmology.", (D. Curtin), November 2023, Postdoctoral Fellow at Stony Brook University in Stony Brook, NY, USA.

BARTRAM, F.M., "Optical studies of topological magnetic materials.", (L. Yang), November 2023, Application Engineer, R&D department, at Zolix Analytical Instruments, Beijing, China.

BASSO, M., "Measurement of Associated Production of Higgs Bosons Decaying to Pairs of W Bosons with the ATLAS Detector at the Large Hadron Collider.", (R.S. Orr), June 2023, Postdoctoral Fellow with the ATLAS Group, Particle Physics Department, Physical Sciences Division, TRIUMF, Vancouver, BC, Canada.

BEDROYA, O., "Resource-Efficient Real-Time Polarization Compensation for MDI-QKD.", (H.K. Lo, L. Qian), June 2023, Quantitative Networking Engineer at Photonic Inc., Coquitlam, BC, Canada.

CABAJ, A., "Synthesizing Observations and Models to Improve Estimates of Snow on Arctic Sea Ice", (P.J. Kushner), November 2023, Postdoctoral Fellow, University of Toronto Mississauga, Geography, Mississauga, ON.

FENG, J.K.F., "Next Generation Ultrafast Electron Diffractometer", (R.J.D. Miller), June 2023.

GORDON, J.A.S., "Exploring Symmetry and Field-Induced Phenomena in Kitaev Materials", (H.-Y. Kee), June 2023, now an IT Specialist at Bank of Montreal (BMO), Toronto, ON, Canada.

HAN, Y.F., "Measurement of Electroweak $VVjj$ Production in Semileptonic Final States in pp Collisions at $\sqrt{s}$ = 13 TeV with the ATLAS Detector", (P. Savard), June 2023, Data Scientist, Rakuten, Tokyo, Japan.

JACKSON, S.G., "Toward a compact two-photon optical clock based on calcium", (A. Vutha), June 2023.

KETABCHI HAGHIGHAT, S., "Measurement of the cross section of the Higgs boson production in association with a Z boson and decaying into W W∗", (P. Krieger), June 2023, Senior Data Scientist at MinervaAI, Toronto, ON, Canada.

KIRBY, D., "Mesoscopic models of cellular signaling reveal strategies for specificity in crosstalk signal pathways", (A. Zilman), June 2023, Senior Policy Analyst at Regina at Government of Saskatchewan, Regina, SK, Canada.

KISLIUK, D.P., "Searches for Lepton Flavour Violating Higgs Boson Decays with the ATLAS Detector", (R.S. Orr), November 2023.

LADAN, J., "Experiments on the formation of rippled icicles", (S.W. Morris), June 2023.

LI, K., "Quantifying the impacts of resolution-dependent model errors on tropospheric ozone simulation", (D.B.A. Jones), November 2023.

LIN, F.X., "Dispersion Measure Variations Predict Lensing in Pulsars", (U.-L. Pen), June 2023, Chief Data Scientist at Fanstories, Toronto, ON, Canada.

LINDQUIST, A.W., "Unconventional Superconductivity in Spin-Orbit Coupled Systems", (H.-Y. Kee), November 2023, NMR Scientist at Foqus Technologies Inc., Toronto, ON, Canada.

MA, Y., "Irreversible fluxes in double-diffusive systems and the origin of thermohaline staircase", (W.R. Peltier), March 2023, Postdoctoral Fellow at MIT, Cambridge, MA, U.S.A.

MACKAY, V., "Instrument Design and Analysis Techniques for Low-Redshift 21 cm Cosmology and Transient Detection with CHORD and CHIME", (K. Vanderlinde), November 2023, Postdoctoral Scholarship at MIT, Cambridge, MA, U.S.A.

MASSARELLI, G., "The properties of Dirac materials: Strain, magnetoelectrics and Krein-Hermiticity", (A. Paramekanti), June 2023, research scientist in the field of artificial intelligence, at a tech startup in USA.

MCGIBBON-GARDNER, S.M., "Models of Elite and Equipotent Dynamics in Cellular Reprogramming and Cancer Growth", (S. Goyal), November 2023.

MENG, H.Y., "Searching for beyond the Standard Model phenomena in dijet events with at least one lepton with the ATLAS detector", (W. Trischuk), November 2023.

OGHBAEY, S., "Fixed Target Sample Delivery for Serial Crystallography and Ultrafast Study of Bismuth by Electron Diffraction", (R.J.D. Miller), June 2023, Lecturer at the University of Toronto, Toronto, ON, Canada.

ROTHSCHILD, J., "The role of stochastic competitive processes on population diversity and dynamics in ecological communities", (A. Zilman), June 2023.

ROY, J., "Aspects of Resummation in Effective and Finite Temperature Field Theory", (M.E. Luke), November 2023, Postdoctoral Fellow, Duke University, Durham, NC, U.S.A.

SPOURDALAKIS, A.G.B., "Effective Field Theory and Machine Learning for Jet Physics", (M.E. Luke), March 2023, Research Associate at N.C.S.R. DEMOKRITOS Institute of Nuclear & Particle Physics Agia Paraskevi, Greece.

URIBE CASTANO, LJ., "Wide-field Polarimetric Second Harmonic Generation Microscopy for Histology Imaging", (V. Barzda), June 2023, Quantitative Analyst at Dynasty Power Inc., Calgary, AB, Canada.

VOLETI, S., "Hidden order and Spin liquids in Correlated d-orbital oxides", (A. Paramekanti), November 2023, Senior Data Scientist, MLSE (Maple Leaf Sports & Entertainment Partnership), Toronto, ON, Canada.

XU, P., "Probing atom on-site interactions in an optical lattice", (J.H. Thywissen), June 2023, Quantitative Strategist at Morgan Stanley, Toronto, ON, Canada.

YIP, L.S.K., "Control of Acoustic Waves by Locally Resonant Phononic Crystals", (S. John), November 2023, Lecturer at the Chinese University of Hong Kong, Hong Kong.

UNIVERSITY OF VICTORIA

ADEGUN, J., "Improvement of the efficiency and Beam Quality of the TRIUMF Charge State Booster", (D. Karlen, O. Kester), Postdoctoral Fellow at TRIUMF in the Beam Delivery Group, Vancouver, BC, Canada.

BI, J., "Dust Dynamics in Protoplanetary Disks: Fables of the Sun and the Wind in the Pre- and Post-Planet-Formation Eras", (R. Dong), Postdoctoral Fellow at AISAA, Taipei, Taiwan, Republic of China.

BIALEK, S., "Skyward AI: Advancing Astronomy with Intelligent Machines", (S. Fabbro, K. Venn), AI/ML Specialist at Oceans Network Canada, Victoria, BC, Canada.

BORUKHOVETSKAYA, A., "Tidal Evolution of Dwarf Spheroidal Satellites", (J. Navarro).

BROMMA, K., "Three dimensional spheroids and gold nanoparticles in combined cancer therapy", (D. Chithrani, W. Beckham), Medical Physics Resident at BC Cancer, Victoria, BC, Canada.

CERVANTES SMITH, M., "Development and Implications of ISOL Target-Materials with High-Carbon content for Short-Lived Radioactive Isotope Beam Production", (A. Gottberg, D. Karlen), now working at TRIUMF in Vancouver, BC, Canada.

ESPLEN, N., "Development of Enabling Technologies for Ultra-high Dose Rate and Spatially Fractionated Radiation Therapy", (M. Bazalova-Carter), now a Postdoctoral Fellow at MD Anderson Cancer Center, University of Texas, Houston, TX, USA.

FOROUGHI ABARI, S., "Searching for Dark Sectors with Proton Bremsstrahlung", (A. Ritz), Postdoctoral Fellow at Carleton University, Ottawa, ON, Canada.

MILLER, C., "Development of Tau Polarimetry for Measuring Beam Polarization in e^+e^- Colliders", (M. Roney), Postdoctoral Fellow at the University of Victoria, Victoria, BC, Canada as well as at Simon Fraser University, Burnaby, BC, Canada.

O'CONNELL, J., "Developing Lower Cost Radiotherapy Solutions for Low and Middle Income Countries", (M. Bazalova-Carter), Postdoctoral Fellow at Dana Farber Cancer Institute, Harvard Medical School, Boston MA, USA.

SHELBAYA, O., "Model Coupled Accelerator Tuning", (O. Kester, D. Karlen), now working at TRIUMF in the Beam Physics Group in Vancouver, BC, Canada.

THOMPSON, W., "Lights in Motion Observing Nearby Planets with Imaging, Wavefront Sensing, Orbital Detection, and Spectroscopy", (C. Marois, F. Herwig), Postdoctoral Fellow at the National Research Council of Canada, Herzberg Astronomy and Astrophysics, Victoria, BC, Canada.

WESTERN UNIVERSITY

GIMENEZ UMBERT, B., "New Aspects of Scattering Amplitudes, Higher-k Amplitudes, and Holographic Quark Gluon Plasmas", (A. Buchel), June 2023, STFC Research Fellow at the University of Southampton.

MAZAREI, M., "Modelling Cell Population Growth", (M. Karttunen), June 2023.

SOLTANI, S., "Computational Modeling of Melanin Aggregation", (M. Karttunen), June 2023.