

PHD PHYSICS DEGREES AWARDED IN CANADIAN UNIVERSITIES

DOCTORATS EN PHYSIQUE DÉCERNÉS PAR LES UNIVERSITÉS CANADIENNES

JANUARY 1 2024 TO DECEMBER 31 2024 / 1 JANVIER 2024 À 31 DÉCEMBRE 2024

This list documents recipients of Ph.D. degrees as reported by Canadian Physics departments. Each entry lists the recipient, thesis title, advisor(s), semester of graduation, and current position (if known).

Cette liste répertorie les titulaires d'un doctorat tels que déclarés par les départements de physique canadiens. Chaque entrée indique le nom du titulaire, le titre de la thèse, le ou les directeurs de thèse, le semestre d'obtention du diplôme et le poste actuel (si connu).

CARLETON UNIVERSITY

ALLEN, C., "Development and Application of a Multimodal Coherent Raman Scattering Microscope", (S. Murugkar), Winter 2024, Pursuing a Research Associate position at Oak Ridge National Laboratory, Oak Ridge, TN, USA.

ELBELTAGI, M., "Study of High Voltage Breakdown in Liquid Xenon Time Projection Chambers and Statistical Interpretation of Machine Learning Assisted Event Discrimination in Rare Event Searches", (R. Gornea), Fall 2024, Now a Data Scientist at Larus, Ottawa, ON, Canada.

ERLANDSON, A., "First observation of solar neutrino absorption on ^{40}Ar using the DEAP-3600 detector", (M. Boulay), Fall 2024, Physicist at Canadian Nuclear Laboratories, Chalk River, ON, Canada.

FLETCHER, E., "Advances in Monte Carlo modelling for characterization of specific energy and absorbed dose distributions from cell to patient length scales", (R. Thomson), Fall 2024.

DALHOUSIE UNIVERSITY

BORSAVAGE, J., "The theranostic benefits of a novel 2.5 MV sintered diamond target beam on a modern radiation therapy linear accelerator", (J. Robar, A. Cherpak), Oct 2024, Medical Physics Resident, Warren Alpert Medical School, Providence, RI, USA.

GUO, H., "Portable Ambient Light-compatible Spectroscopic Approach Applied to Non-invasive Real-time Quantification of Global and Macrovesicular Steatosis in Donor Liver: Proof of Concept, Development, and Early Commercialization Attempts", (K. Hewitt), May 2024, Clinical Medical Physics Resident, Icahn School of Medicine, New York, NY, USA.

KALLIECHARAN, D., "Measurements of the force exerted by a forced pulsed water jet, and its affect on the mechanical properties of titanium alloys", (T. Monchesky), May 2024.

LYNCH, N., "A 3D Printed Patient-Specific *in vivo* Dosimetry System", (J. Robar, T. Monajemi), Oct 2024, Oncology Physics Resident, Dept of Human Oncology, Madison, WI, USA.

MARRIOTT, A., "3D Simultaneous Quantification of SPIO and Gadolinium contrast agents *in vivo* using MR Fingerprinting", (K. Brewer, J. Rioux), Oct 2024, Research Scientist, Synex Medical, Toronto, ON, Canada.

PRIDHAM, G., "Modelling Causal Mechanisms in Organismal Aging", (A. Rutenburg), Oct 2024, Postdoctoral Fellow, Weizmann Institute, Rehovot, Israel.

RATHORE, D., "Understanding and modifying active material structures for improved Li-ion batteries", (J. Dahn), May 2025, Research Scientist, BMW, Munich, Germany.

MCMaster UNIVERSITY

BANGASH, S.U.K., "Designing and Evaluating a 109 Cd based XRF System For Skin Iron Measurements: A Validation Study in Normal and Iron Overload Conditions", (M. Farquharson, F. McNeill), Winter 2024, pursuing a CAMPEP diploma at McGill University, Montreal, QC, Canada.

BESHARAT, A., "Effective Field Theory of Dissipative Dynamics On Lie Group", (S. Sibiryakov), Fall 2024, Postdoctoral Fellow at the University of Alberta, Edmonton, AB, Canada.

BICKLEY, L., "Studies to improve the *in vivo* measurement of strontium by X-ray fluorescence", (F. McNeill), Spring/Summer 2024.

BOGOJEVIC, S., "Magnetic Monopoles and Dyons: The Low-Energy Perspective", (C. Burgess), Fall 2024.

BORISSOV, A., "Low-Energy Effective Field Theories for the Antiferromagnetic Quantum Critical Metal with Z₂, O(2) and O(3) Spin Symmetries", (S. Lee), Spring/Summer 2024, Quantum Computing Researcher at SoftwareQ, Waterloo, ON, Canada.

HE, H., "Molecular Gas and Star Formation in Nearby Starburst Galaxy Mergers", (C. Wilson), Summer 2024, Postdoctoral Fellow at the University of Bonn, Bonn, Germany.

HESHMATZADEH, Y., "Bulk Properties of Cohesive Frictionless Granular Aggregates", (K. Dalnoki-Veress), Fall 2024.

HOGGARTH, J., "Cohesive Oil Droplets As An Idealized Model Granular System", (K. Dalnoki-Veress), Fall 2024, Postdoctoral Fellow at Yale University, New Haven, CT, USA.

KHATTAK, H., "Driven Motion in Droplets", (K. Dalnoki-Veress), Spring/Summer 2024, Research Associate at McMaster University, Hamilton, ON, Canada.

LEDGER, B., "Using the Cyanide Radical to Trace Dense Molecular Gas in Nearby Star-Forming Galaxies", (C. Wilson), Fall 2024, Postdoctoral Fellow at the University of Victoria, Victoria, BC, Canada.

SUNDARAM, S., "Effective field theory based on the quantum inverted harmonic oscillator and the inverse square potential with applicatios to Schwinger pair creation", (D. O'Dell), Fall 2024.

WANG, J., "Local Physics of Disordered Quantum Spin Liquid Systems Individuated by NMR and Inverse Laplace Transform 1=T1 Analysis", (T. Imai), Spring/Summer 2024, Postdoctoral Fellow at the University of Toronto, Toronto, ON, Canada.

QUEEN'S UNIVERSITY

ANDERSON, M., "Studies of machine learning for event reconstruction in the SNO+ detector and electronic noise removal in p-type point contact high purity germanium detectors", (R. Martin), Summer 2024, Data Scientist at Larus, Ottawa, ON, Canada.

BISARIA, D., "Hunting for anomalous gas: kinematic models of spiral galaxies in 2D and 3D", (K. Spekkens), Spring 2024.

BULENGA, T., "Advancing An Open-Source Radiation Treatment Planning for Orthovoltage X-ray and Cobalt-60 Teletherapy", (J. Schreiner), Spring 2024, Medical Physics Resident at Thunder Bay Regional Health Sciences Centre, Thunder Bay ON, Canada.

DARLING, K., "Linear Operator Theory of Phase Mixing in Collisionless Systems", (L. Widrow), Spring 2024.

GODFREY, J., "Innovation Through Optical Manipulation: From Parahydrogen Macrocoherence to Enhanced 2D Semiconductors", (J. Fraser), Fall 2024.

HAWLEY HERRERA, H., "Light collection as a veto for PICO and SBC dark matter searches", (K. Clark), Summer 2024, Research Scientist at Canadian Nuclear Laboratories, Chalk River, ON, Canada.

LI, H., "Weighing the Milky Way While Exploring Disequilibrium", (L. Widrow), Spring 2024, Research Scientist at the School of Physics and Astronomy, Shanghai Jiao Tong University, Shanghai, China.

TYSON, K., "Manipulation and Enhancement of Excitonic Optical Spectroscopy in Two-Dimensional Semiconductors", (R. Knobel), Spring 2024, Staff Scientist at Light Machinery, Ottawa, ON, Canada.

SIMON FRASER UNIVERSITY

DEABREAU, A., "Towards Integration of Optically Active Defects in Silicon Photonics", (S. Simmons), Spring 2024, Quantum Networking Engineer at Photonic, Burnaby, BC, Canada.

LEIGHTON, M., "Stochastic Thermodynamics of Multicomponent Molecular Machines", (D. Sivak), Fall 2024, Mossmann Independent Postdoctoral Fellow at Yale University, New Haven, CT, USA.

MARTIN, M., "Electromagnetic Transition Rate Measurements in ²⁸Mg and Identification of Exotic Molecular Symmetries in Actinide Nuclei", (K. Starosta), Spring 2024, Postdoctoral Researcher at Argonne National Laboratory, Lemont, IL, USA.

MOKHTARI-JAZI, A., "Correlations in the Clean and Disordered Bose Hubbard Model", (M. Kennett), Spring 2024, Researcher at the BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada.

WANG, X., "Cosmological Tests of Gravity with MGCAMB", (L. Pogosian), Summer 2024, Postdoctoral Researcher at Peking University, Beijing, China.

TORONTO METROPOLITAN UNIVERSITY

DAY, J., "Assessment of Cadmium Telluride Photon-Counting Detectors for Breast Imaging Applications", (J. Tanguay), Spring 2024, Postdoctoral Researcher at University of Victoria, Victoria, BC, Canada.

LALEGANI DEZAKI, F., "Insights from Random Language Model", (E. De Giuli), Spring 2024.

SAFAKISH, A., "Predicting Head and Neck Cancer Treatment Outcomes with QUS, CT and MRI Radiomics Enhanced with Deep Texture Analysis, a Machine Learning Approach", (G. Czarnota, A. Pejovic-Milic), Fall 2024, Medical Physics Resident at Thomas Jefferson University, Philadelphia, PA, USA.

VIRDEE, S., "Development and Evaluation of the Computed Tomography Imaging Normalized Joint Count for Quantifying Emphysema", (M. Kirby), Fall 2024, Medical Physics Resident at Sunnybrook Health Sciences Centre, Toronto, ON, Canada.

UNIVERSITÉ DE MONTRÉAL

CHOUTEAU, S., « Compréhension des mécanismes réactionnels dans un procédé hybride de dépôt de couches minces nanocomposites couplant plasma et injection de solution colloïdale », (L. Stafford, A. Granier), Fall 2024, Postdoctoral Fellow at JSPS (Japan Society for the Promotion of Science), Osaka University, Osaka, Japan.

HERRMANN, A., « Étude expérimentale et modélisation de la dynamique spatiotemporelle de décharges nanosecondes impulsionsnelles en contact avec l'eau », (A. Hamdan, J. Margot), Postdoctoral Fellow at CNRS (École Polytechnique), Palaiseau, France.

JAHANDAR, F., « Étude de la composition chimique des naines M du voisinage solaire grâce à la spectroscopie infrarouge à haute résolution », (R. Doyon), Fall 2024, Data Scientist at Roc360, New York City, NY, USA.

KHOSRAVI, A., « Modélisation de la cinétique des interactions entre l'hydrogène et les défauts dans le Fer à l'aide de la technique d'activation et de relaxation cinétique (ARTc) », (N. Mousseau), Fall 2024, Postdoctoral Fellow at the University of British Columbia (UBC), Vancouver, BC, Canada.

MANN, C., "TESS Exoplanet Candidate Follow-Up with Ground- and Space-Based Instruments", (D. Lafrenière), Winter 2024, Postdoctoral Fellow (Research Officer) at the National Research Council Canada, Herzberg Astronomy and Astrophysics Research Centre, Victoria, BC, Canada.

PASCUAL DIAS, B., "Improving the Search for New Physics and the Identification of Electrons using Machine Learning at the ATLAS Experiment", (J.-F. Arguin), Fall 2024, Postdoctoral Fellow at Université Clermont Auvergne, Clermont-Ferrand, France.

PELLETIER, S., "Probing the Elemental Composition of Gas Giant Exoplanets in the Context of their Formation and Evolution", (B. Benneke), Fall 2024, Postdoctoral Fellow at University of Geneva, Geneva, Switzerland.

PIAULET, C., « Caractérisation des atmosphères d'exoplanètes dans le contexte de leur formation et évolution », (B. Benneke), Fall 2024, Postdoctoral Fellow at University of Chicago in Chicago, IL, USA.

RADICA, M., "Insights into the Diversity of Exoplanet Atmospheres in the Era of JWST", (D. Lafrenière), Fall 2024, Postdoctoral Fellow at University of Chicago, Chicago, IL, USA.

RHEA, C., « Avancées récentes dans l'observation et l'application des techniques d'apprentissage automatique aux études des galaxies et des amas de galaxies », (J. Hlavacek-Larrondo), Fall 2024, Software Algorithm Developer (développeur de logiciel algorithmique) at Dragonfly Focused Research Organization, Santa Fe, NM, USA.

ROBERT, R., « Étude de décharges Ar-NH₃ en simple et double fréquence à la pression atmosphérique », (L. Stafford, F. Massines), Fall 2024, Postdoctoral Fellow at Université de Montréal, Montréal, QC, Canada.

ZAIMI, M., « Algèbre d'Askey–Wilson, centralisateurs et fonctions spéciales (bi)orthogonales », (L. Vinet), Fall 2024, Postdoctoral Fellow at Perimeter Institute for Theoretical Physics, Waterloo, ON, Canada.

UNIVERSITÉ LAVAL

AOUI, S., « Développement et caractérisation de verres et fibres optiques à base de système BaO - Ga₂O₃ - GeO₂ pour les lasers à fibre dans l'infrarouge moyen », (Y. Messaddeq, T. Cardinal), Summer 2024, Postdoctoral Fellow, ICMCB, Bordeaux-France.

BERUMEN MURILLO, F., "Deep learning-based advanced dose calculations in low-dose rate prostate brachytherapy", (L. Beaulieu, S. Enger), Summer 2024, Postdoctoral Fellow, Université de Montréal et IVADO, Montreal, QC, Canada.

BUQUET, J., « Intégration et applicabilité des méthodes d'apprentissage supervisé pour la conception de systèmes optiques grand-angle », (S. Thibault, J-F. Lalonde), Summer 2024, AI Developer, Immervision Inc., Montréal, QC, Canada.

CORRER, W., "Development of chalcogenide-based resistive switches", (Y. Messaddeq), Winter 2024, Chercheur, INO, QC, Canada.

LORD, M-P., « Développement de lasers à fibre optique opérant dans la région visible du spectre électromagnétique », (R. Vallée, M. Bernier), Winter 2024, Chercheure, Teraxion, QC, CANADA.

ROCHON, J., « Développement et application d'un analyseur de mobilité ionique différentielle (FAIMS) à électrodes multiples en LDTD-MS/MS », (S. Rainville, R. Paquin), Winter 2024, Global Technological Support Coordinator at Phytronix, QC, Canada.

SAFARI, M., "Using MRI Physics and AI for Multi-Parametric MRI-Guided Radiotherapy", (L. Archambault, A. Fatemi-Ardekani), Winter 2024, Postdoctoral Fellow, Emory University, Atlanta, GA, USA.

TABOURIN, L., « Développement d'outils miniatures à base de cristaux liquides permettant d'améliorer la résolution spatiale de mini-endoscopes », (T. Galstian, F. Bretzner), Winter 2024, Professeur au CEGEP St-Lawrence, QC, Canada.

ZEMSKA, Z., "Development of a new generation of tunable liquid crystal lenses", (T. Galstian), Fall 2024, chercheur(se) au PATQER Photonique Inc., Québec, QC, Canada.

UNIVERSITY OF ALBERTA

BUI, H., "Integrated analysis of anomalous microseismic behavior in a Montney treatment: Engineering parameters, locations, moment tensors, and geomechanics", (M. van der Baan), Winter 2024, Alberta Geological Survey, Edmonton, AB, Canada.

CHASE, B., "Tectonic studies of the lithosphere of Laurentia using magnetotelluric data and the implications for diamond resources", (M. Unsworth), Fall 2024.

DEAN, C., "Dynamics and Composition of Collapsar Disk Outflows", (R. Munoz), Summer 2024.

GAERTNER, A., "The Pacific Ocean Neutrino Experiment: Site characterization, background studies and tau neutrino sensitivity", (C. Krauss), Summer 2024, Postdoctoral Fellow at Simon Fraser University, Burnaby, BC, Canada.

GANESH, S., "Instantons in Parton Gauge Theories of Condensed Matter", (J. Maciejko), Summer 2024, Postdoctoral Fellow at Yale University, New Haven, CT, USA.

GUO, Y., "Optimal seismic acquisition design, reconstruction and denoising", (M. Sacchi), Winter 2024.

HATFULL, R., "When Stars Collide: Simulating a Stellar Contact Binary Merger", (N. Ivanova), Fall 2024, Independent Developer.

HUGHES, A., "Enabling the full capacity of meekat for studying X-ray binaries", (G. Sivakoff), Fall 2024.

JENSEN, C., "Time-Resolved Terahertz Spectroscopy of Semiconductor Nanomaterials", (F. Hegmann), Winter 2024, Research Associate at the University of Alberta, Edmonton, AB, Canada.

NGUYEN, P., "Terahertz near-field coupling in scanning tunneling microscopy", (F. Hegmann), Winter 2024.

RASTOGI, A., "Broadband, on-demand optical memories based on alkali-atom-ensemble for photonic quantum technologies", (L. LeBlanc), Fall 2024, Postdoctoral Fellow at Imperial College London, London UK.

SENARATH YAPA ARACHCHIGE, P., "Unconventional Cooper pairing and confinement: Studies of lattice superconductivity and superfluid helium-3 enclosed by surfaces", (J. Maciejko, F. Marsiglio), Spring 2024, Postdoctoral Fellow at Universität Innsbruck, Fakultät für Mathematik, Informatik und Physik, Institut für Experimentalphysik, 6020 Innsbruck, Austria.

SMITH, B., "Nonlinear interactions using neutral atomic gases", (L. LeBlanc), Winter 2024, Postdoctoral Fellow at Sandia National Laboratories, Albuquerque, NM, USA.

TORRES BAUTISTA, K., "Seismic reflectivity inversion using deep learning and model-based methods", (M. Sacchi), Spring 2024.

UNIVERSITY OF BRITISH COLUMBIA

BELLEY, A., "Probing beyond standard model physics through *ab initio* calculations of exotic weak processes in atomic nuclei", (R. Kruecken, J. Holt), Fall 2024.

CAN, O., "Topological superconductivity in twisted cuprates and device applications inspired by their Josephson physics", (M. Franz), Spring 2024, Research Scientist at Model 6, Vancouver, BC, Canada.

CARPENTIER, E., "Four dimensional dose calculations and planning strategies for dynamic tumour tracking treatments", (A. Mestrovic, S. Reinsberg), Spring 2024, Medical Physics Resident at BC Cancer, Vancouver, BC, Canada.

CHILD, T., "Direct entropy measurements in mesoscopic systems : from proof of concept to the Kondo regime", (J. Folk), Spring 2024, Founder and Developer at AthenalInstruments, Vancouver, BC, Canada.

FRIELING, E., "Explorations of universality in ultra-cold and room-temperature collisions", (K. Madison), Spring 2024, Postdoctoral Fellow at TRIUMF, Vancouver, BC, Canada.

HSUEH, C., "A journey into computational protein design : simulation methods, physical origins of disease, and therapeutic design for neurodegenerative diseases and COVID19", (S. Plotkin), Spring 2024.

KONIAR, H., "Dosimetry and biodistribution of actinium radiopharmaceuticals for targeted alpha therapy", (P. Schaffer, C. Uribe), Spring 2024, Medical Physics Resident at Princess Margaret Cancer Centre, Toronto, ON, Canada.

KORCHINSKI, D., "Scaling theories and simulation of ductile yielding in amorphous solids", (J. Rottler), Fall 2024, NSERC Postdoctoral Fellow at École Polytechnique Fédérale de Lausanne, Lausanne, VD, Switzerland.

KRAFT, A., "Inconclusive results, confirmation bias, and model breakdowns: exploring and improving student experiences in a first year physics lab", (D. Bonn, J. Ives), Fall 2024.

LYKIARDOPOULOU, E. "Resurrecting the N = 20 shell closure and upgrades to the TITAN measurement Penning trap", (J. Dilling), Spring 2024.

MILLER, C., "An analysis of imaging and biological effects impacting theranostic dosimetry using radiopharmaceutical pairs", (A. Rahmim, C. Uribe), Fall 2024.

POON, J., "Cardiac radiosurgery motion management – investigation of regional myocardial motion and cardiac gating", (S. Thomas, S. Reinsberg), Spring 2024.

PRADEEP, A., "Novel reconstruction techniques for detecting low mass dark matter in the SuperCDMS experiment and characterization of SuperCDMS SNOLAB detectors", (S. Oser), Fall 2024, Research Associate at SLAC National Accelerator Laboratory, Menlo Park, CA, USA.

REEVES, W., "Quantum chaos in conformal field theories", (M. Rozali), Spring 2024.

REID, G., "Topics in numerical relativity", (M. Choptuik), Spring 2024.

ROSTAMZADEH, M., "Markerless dynamic tumor tracking using diaphragm as a soft-tissue anatomical surrogate for liver tumors", (A. Bergman, S. Reinsberg), Spring 2024, Medical Physics Resident at BC Cancer, Abbotsford, BC, Canada.

SAMPLE, C., "Towards improving radiotherapeutic treatment of the parotid glands : a cross-modality investigation", (H. Clark, S. Reinsberg), Spring 2024, Medical Physics Resident at BC Cancer, Abbotsford, BC, Canada.

TULLY, A., "From growth to TR-ARPES of C_{60} : a prototypical OPV system", (S. Burke, D. Jones), Spring 2024, Director at New Leaf, Vancouver, BC, Canada.

YANG, D., "Emergent optical and electronic properties in atomically thin rhombohedral-stacked transition metal dichalcogenides", (Z. Ye), Fall 2024.

ZUREL, M., "Classical descriptions of quantum computations : foundations of quantum computation via hidden variable models, quasiprobability representations, and classical simulation algorithms", (R. Raussendorf, W. Unruh), Fall 2024, NSERC Postdoctoral fellow at Simon Fraser University, Burnaby, BC, Canada.

UNIVERSITY OF GUELPH

CORRIGAN, E., "Balancing the Equation: Examining Gender Gaps in Physics and STEM Across Canadian Classrooms", (M. Williams, M. Wells), February 2024.

UNIVERSITY OF MANITOBA

ALKADOOR, B.A.R., "Magnetic properties of nanoparticle arrays", (B.W. Southern, G. Gwinner), October 2024.

DUGGAL, C., "Galactic scale radio-mode feedback in compact radio galaxies", (C. O'Dea, S. Baum), October 2024, Research Associate at the University of Manitoba, Winnipeg, MB Canada

HUCKO, T., "Measurement of the 7s – 8s M1 transition in laser-trapped francium", (G. Gwinner), February 2024, Scientific Employee at PlanQ, Ulm, Germany.

MONKMAN, K., "Entanglement in Symmetry - Protected Topological Phases", (J.M.R. Sirker), February 2024, Postdoctoral Researcher at UBC Blusson Quantum Matter Institute, British Columbia, Canada.

NICKEL, R., "Understanding the Role of Fe-O Hybridization in the Characteristic Transitions of Iron Oxide Nanoparticles", (J. van Lierop), February 2024, European Synchrotron Research Facility Grenoble.

REIMER, T.A., "Robust Approaches to Image Reconstruction and Image Quality Analysis in Breast Microwave Sensing", (S. Pistorius), October 2024, Radiotherapy Physics Resident at CancerCare Manitoba.

UNIVERSITY OF NEW BRUNSWICK

MORIN, D., "A New Low Field Magnet for Overhauser Dynamic Nuclear Polarization Magnetic Resonance Studies", (B. Balcom), Fall 2024.

REID, B., "The Assimilative Canadian High Arctic Ionospheric Model (A-CHAIM)", (P. T. Jayachandran, D. Themens), Summer 2024.

UNIVERSITY OF OTTAWA / UNIVERSITÉ D'OTTAWA

BÉGIN, J.-L., "Strong-Field Chiral Light-Matter Interaction", (R. Bhardwaj), August 2024, Postdoctoral Fellow at University of Ottawa, Ottawa, ON, Canada.

CHARRON, M., "Nanopore Resistive Sensing: Bridging Theory and Experiments", (V. Tabard-Cossa), December 2024, Postdoctoral Fellow at University of Ottawa, Ottawa, ON, Canada.

CUI, W., "Tunable broadband and high-field THz time-domain spectroscopy system", (R. Bhardwaj, J.- M. Ménard), Research Associate, SLAC National Accelerator Laboratory, Menlo Park, CA, USA.

FORCADE, G., "High-Efficiency III-V Semiconductor Device and System Optimization for Photovoltaic Applications", (K. Hinzer), December 2024, Optical Engineer, Ciena, Ottawa, ON, Canada.

FRANCISCO FERRER GARCIA, M., "Structuring Light: From knots to geometrical phases", (E. Karimi), May 2024, Postdoctoral Fellow at University of Ottawa, Ottawa, ON, Canada.

HUFNAGEL, F., "Spatially Structured Light for High-Dimensional Quantum Information", (E. Karimi), September 2024, Postdoctoral Fellow at Simon Fraser University, Burnaby, BC, Canada.

JAIN, A., "Helical phase-based spectroscopy in matter", (R. Bhardwaj), September 2024, Senior Optical Scientist, Irradiant Technologies, Cambridge, MA, USA.

KILLAIRE, G.J.R., "Applications of Ultrafast Laser Ablation to Material Colouring and Physical Unclonable Functions", (A. Weck, P. Berini), October 2024, Postdoctoral Fellow at Carleton University, Ottawa, ON, Canada.

KRARUP, O., "Enhancement of Fiber Optical Environmental Sensor Performance Via All-Optical Signal Processing", (X. Bao), February 2024, Optical Engineer, Ciena, Ottawa, ON, Canada.

LAURENT MOLINO, L., "Scanning tunneling microscopy investigations of interlayer interaction induced superstructures in transition metal dichalcogenides", (A. Luican-Mayer), October 2024, Application Scientist, Onnes Technologies, Leiden, Netherlands.

MARTINEZ BECERRIL, A.C., "Unitary transformations of optical beam arrays", (J. Lundeen), March 2024, pursuing a Postdoctoral Fellowship at University of Toronto, Toronto, ON, Canada.

PLUMADORE, R., "Investigating Band Structure Modifications in 2D Materials and Heterostructures via Scanning Tunneling Microscopy and Spectroscopy", (A. Luican-Mayer), March 2024, Senior Technician, MOCVD, at University of Ottawa, Ottawa, ON, Canada.

SCHAEFER, S., "Design and operation on monolithic InAs/InP quantum dash ridge laser diodes operating in the C-band", (K. Hinzer), February 2024, PIC Design Engineer, Ciena, Ottawa, ON.

WANG, T., "Following a Photochemical Reaction of Br₂ using Photoion and Photoelectron Momentum Spectroscopy", (A. Staudte), March 2024, Postdoctoral Researcher, Wuhan Institute of Physics and Mathematics, Chinese Academy of Science, Wuhan, China.

UNIVERSITY OF REGINA

KOERICH, L., "Development of scintillator-based components for the photosensor system for the Intermediate Water Cherenkov Detector of the Hyper-K experiment and for the time of flight system of the Water Cherenkov Test Experiment", (M. Barbi, N. Kolev), Fall 2024, Postdoctoral Fellow at University of Regina, Regina, SK, Canada.

KUMAR, V., "Measurement of the pion exclusive electro-production cross-section in the E12-19-006 experiment in Hall-C at Jefferson Lab", (G. Huber), Fall 2024, Postdoctoral Fellow at University of Regina, Regina, SK, Canada.

NEELAMANA, V., "Beam asymmetry in the reaction channel $\gamma p \rightarrow \eta \Delta + \text{at Glue X}$ ", (Z. Papandreou), Fall 2024, Postdoctoral Fellow at University of Regina, Regina, SK, Canada.

SURESH, K., "Partial wave analysis of Neutral b1 Meson at GlueX", (Z. Papandreou), Spring 2024, Postdoctoral Fellow in the Data Science Department, College of William & Mary, Williamsburg, VA.

UNIVERSITY OF SASKATCHEWAN

BSHARAT, H., "Experimental Studies of Fluctuations and Turbulences in the STOR-M Tokamak and TJ-II Stellarator", (C. Xiao), Fall 2024, Assistant Professor at An-Najah National University and at Palestinian Technical University, Nablus city, West Bank, Palestine.

BUTLER, M., "Solution Methodology in Higher Dimensional Extended Einstein Theory", (M. Ghezelbash), Spring 2024.

POLISCHUK, T., "Measurement of the Neutron Spin-Polarization in Deuterium Photodisintegration", (R. Pywell), Spring 2025, Postdoctoral Researcher at University of Hawaii at Manoa, Honolulu, HI, USA.

RUNGE, E., "Development, Analysis and Evaluation of the LIFE Prototype Instrument", (A. Bourassa, D. Degenstein), Fall 2024, Research Scientist at Dias Geophysical, Saskatoon, SK, Canada.

YOUSAF, T., "Plasma Immersion Ion Implantation Studies of Tungsten and Tungsten Alloys as Plasma-Facing Components for Fusion Devices", (M. Bradley, J. Szpunar), Spring 2024

UNIVERSITY OF TORONTO

ANTO-SZTRIKACS, N., "Open quantum system techniques beyond the Lindblad equation", (D. Segal).

CHOU, C.-C., "Using ESA's Aeolus Mission to Study the Impact of Wind Observations on Numerical Weather Prediction", (P.J. Kushner).

CLEPKENS, J., "Unconventional Multiband Superconductivity in Correlated Metals", (H.-Y. Kee).

JOW, D.L., "Theory and applications of wave optics in the gravitational and plasma lensing of coherent sources", (U.-L. Pen).

KLYSHKO, Y., "Not Just Proteins: Unraveling the Role of Water in Protein Dynamics and Allostery", (S. Rauscher).

LAU, B., "Anomalous electronic transport in the hexagonal ternary arsenides FeCrAs, CrNiAs, and CrPdAs", (S.R. Julian).

LUPU-GLADSTEIN, N., "Quantum Measurements are Disturbing: Experiments studying the role of disturbance in postselected metrology, quantum pigeonholes, and entangled sheep", (A.M. Steinberg).

MA, T., "An (Ultimate) Guide to Surviving on the Bacterial Battleground: The Role of Mechanics on Microbial Ecology within Confined Spaces", (J. Milstein).

MIU, O., "Boosted top quark measurements in hadronic final states with the ATLAS detector", (P.K. Sinervo).

MORRIS, M.O., "Dynamics of Extreme Wind Speeds in Canada and Their Response to Climate Change", (P.J. Kushner).

SCHEE, M., "Thermohaline staircases in the Arctic Ocean: Detection, evolution, and interaction", (N. Grisouard).

SCHULTZ, D.J., "Quantum Phase Transitions in the Multipolar Kondo Lattice", (Y.-B. Kim).

SMYTH, S., "Characterization of Disordered Protein States and Complexes using Single-molecule Fluorescence Spectroscopy", (C. Gradinaru).

UNCU, J., "The Scattering of Internal Tides by Balanced Flows", (N. Grisouard).

WANDLER, F.D., "Nonperturbative physics of center-stabilized compactifications of Yang-Mills theory & A new perturbative method for extracting effective spin models out of condensed matter systems", (E. Poppitz).

ZHANG, E.Z., "Dynamical Signatures of Exotic Phases in Frustrated Honeycomb Magnets", (Y.-B. Kim)

UNIVERSITY OF VICTORIA

ALHUSSAN, A., "A Novel Synergetic Combined Modality of Nanotechnology, Chemotherapy, and Radiotherapy for the Treatment of Pancreatic Cancer", (D. Chithrani), Spring 2024, Entrepreneur.

CARLSON, E., "Searching for Long-Lived Supersymmetric Particles Using Displaced Vertices and Missing Transverse Energy with the ATLAS Detector", (I. Trigger, R. Kowalewski), Fall 2024, Process Engineer at nLIGHT, Vancouver, WA, USA.

CHEN, B., "Differential cross-section measurements of $WbWb$ production in the lepton+jets channel at $\sqrt{13}$ TeV with the ATLAS detector", (R. Kowalewski), Summer 2024, Graduate Seismic Analyst for Viridien in Calgary, AB, Canada.

CROTTS, K., "Expedition Unknown: Characterizing and Modelling Perturbed Debris Disks in Search for Elusive Planets", (B. Matthews, R. Dong), Summer 2024, Postdoctoral Fellow at the Space Telescope Science Institute, Baltimore, MD, USA.

HART, A., "Dosimetry and Radiobiology of ultrahigh dose-rate radiotherapy delivered with low-energy X-rays and very high-energy electrons", (M. Bazalova-Carter), Summer 2024, Postdoctoral Fellowship at BC Cancer, Victoria, BC, Canada.

HUBER, A., "Optical, mechanical, and detector developments for the Prime-Cam 850 GHz module", (S. Chapman, J. Albert), Fall 2024, Postdoctoral Fellow at the Dominion Astrophysical Observatory, NRC Canada, Victoria, BC, Canada.

MAO, S., "Accelerating Fluid Dynamics Problems in Planet Formation with Machine Learning", (R. Dong), Summer 2024, Postdoctoral Fellow at Los Alamos National Laboratory, Los Alamos, NM, USA.

RICHTSMEIER, D., "Exploration of applications of photon-counting detector computed tomography (CT) using a table-top CT system", (M. Moffitt, M. Bazalova-Carter), Spring 2024, Medical Physics Resident at BC Cancer, Victoria, BC, Canada.

SAEEDZADEH, V., "Dynamics of Galaxy Evolution: Insights from Circumgalactic Medium and Supermassive Black Hole Mergers", (A. Babul), Spring 2024, Postdoctoral Fellow at Johns Hopkins University, Baltimore, MD, USA.

UNIVERSITY OF WINDSOR

BONDY, A., "The Broad Utility of Pseudospectral Methods in Atomic Physics", (G. Drake), October 2024, Postdoctoral Fellow at Drake University, Des Moines, IA, USA.

WESTERN UNIVERSITY

ADAM, M., "Luminescence and Structural Properties of Silicon-Germanium Quantum Structures Fabricated by Ion Implantation", (L. Goncharova, P. Simpson), Winter 2024, Photonics Engineer, Xanadu, Toronto, ON, Canada.

AFRASIABIAN, N., "Predictive Models of Polymer Composites", (C. Denniston), Summer 2024, Research Assistant, Western University, London, ON, Canada.

SOLTANI, F. "Black-to-White Hole Transition", (F. Vidotto, D. Christensen) Winter 2024.