PhD Physics Degrees Awarded in Canadian Universities

Doctorats en physique décernés par les universités canadiennes

January 1 to December 31 2022 / 1er janvier au 31 Décembre 2022

CARLETON UNIVERSITY

ALDOSARY, G., "Advancing Treatment Accuracy of Accelerated Partial Breast Irradiation", E. Vandervoort, February 2022, now a Medical Physics Fellow at The Ottawa Hospital, Ottawa, Ontario, Canada.

CONCORDIA UNIVERSITY

SALAHI, HAMID REZA, "Simulation of Multi Pulse EPR Signals for Distance Measurement in Biological Systems by Exploitation of COSY, DQ, DQM, DQC, and DEER Signals; Relaxation Due to Fluctuation of Spin-Hamiltonian Parameters of Echo ELDOR Signal; and Effect of Instantaneous Diffusion and Many Body Interaction in a Frozen Malonic Acid Crystal on a SECSY Signal", (S. Misra), October 2022.

ZUBAIR, MUHAMMAD, "Quantum Transport in Dirac Materials and Their Heterostructures", (P. Vasilopoulos), May 2022, Postdoctoral fellowship at the University of Alabama, Tuscaloosa, AL, USA.

DALHOUSIE UNIVERSITY

BOYS, B., "Global Trends in Satellite-Derived Fine Particulate Matter & Developments To Reactive Nitrogen In A Global Chemical Transport Model", (R. Chang), May 2023.

BRADY, B., "Exploring Transient Neural Events In Healthy Populations Using Non-Invasive Neuroimaging", (T. Baroudouille), October 2022, Postodoctoral Researcher, NovaResp Technologies Inc., Halifax, NS, Canada.

CHURCH, C., "Techniques to Minimize the Dosimetric Impact of Intrafractional Motion with Improved Treatment Accuracy and Efficiency on a C-arm Medical Linear Accelerator", (A. Syme, D. Parsons), October 2022, Physics Resident, Ottawa Hospital, Ottawa, ON, Canada.

CLEGG, C., "Characterizing Degradation in Organic Redox Flow Batteries", (I. Hill), May 2023, Defending her Thesis on December 12 2022.

CORMIER, M., "Li-ion Battery Materials Theory and Computation to Guide and Interpret Experiments", (J. Dahn), May 2023, Sr. Cell Research Scientist, Novonix, Bedford, Nova Scotia, Canada.

FARRELL, S., "Developing Computational Models To Understand Aging", (A. Rutenberg), May 2022, Post Doctoral Fellowship, University of Toronto, Dept of Physics, Toronto, ON, Canada.

LOGAN, E., "Understanding and Mitigating Degradation In Li-Ion Batteries", (J. Dahn), October 2022.

ÉCOLE POLYTECHNIQUE MONTRÉAL

AGIOTIS, L., "Nonlinear Propagation of Femtosecond Laser Pulses in Plasmonic Nano-Colloids", (M. Meunier), April 2022, Postdoctoral Fellow at Polytechnique Montréal, Montréal, Quebec, Canada.

ALLARD, C., « Étude sur la synthèse et les propriétés optique de nanohybrides composés de nanotubes et de colorants organiques encapsulés », (P. Desjardins, R. Martel), December 2021, searching for employment.

ATTENDU, X., "Advancements in Multimodal Endoscopic Optical Coherence Tomography: Novel Hardware, Software, and Optical Strategies", (C. Boudoux,T. v. Leeuwen), Septembre 2022, Postdoctoral Fellow at Polytechnique Montréal/Amsterdam University Medical Centers, Montréal, Quebec/Amsterdam, Hollande du Nord, Canada/Pays Bas.

CAO, Y., "Additive Manufacturing of Terahertz Waveguide Components for THz Sensing and Communication", (M.Skorobogatiy), December 2021, searching a postdoctoral Fellowship in North American or Japan.

CASTONGUAY, S., "Capillary Modelling for Flow Control and Accurate Mass Transport in Microfluidics", (T. Gervais, E. Delamarche), April 2022, Research Engineer (Explosion & Fluid Dynamics) at Lloyd's Register- Applied Technology Group, Darmouth, Nova Scotia, Canada.

NICOLAS, J., « Ingénierie de contrainte et stabilité des hétérostructures épitaxiales de $Ge_{1-x}Sn_x$ », (O. Moutanabbir), June 2022, searching for employment.

PHANEUF-L'HEUREUS, A.-L., "Field-Induced Modulation of Single-Exciton Emission in ZnSe:Te2 under Resonant and Non Resonant Excitation", (S. Francoeur), April 2022, searching for employment.

REALI, M., "Eumelanin for Organic Electronics: Film Formation and Transport Physics", (C. Santato, F. Cicoira), December 2021, Postdoctoral Fellow at Polytechnique Montréal, Montréal, Quebec, Canada.

McGILL UNIVERSITY

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

AL KHARUSI, S., "Development of a water Cherenkov muon veto for the nEXO neutrinoless double beta decay experiment", (T. Brunner, D. Haggard), February 2024.

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

BOYCE, H., "Observational probes of supermassive black hole environments: from the event horizon to the sphere of influence", (D. Haggard), February 2023.

BURNS, D., "Timescale coupling phenomena with hydrodynamics phase field crystal models: The atomic scale shuffle", (N. Provatas, M. Grant), February 2024.

CHURCHILL, "Electromagnetic radiation from various stages of relativistic heavy-ion collisions", (C. Gale), February 2023.

COWIE, M., "Charge re-organization timescales and loss tangents at semiconductor surfaces measured by nc-AFM", (P. Grutter), October 2023.

ENGSTRÖM, L., "Combining spin-orbit coupling and multi-orbital interactions: a recipe for novel magnetism and superconductivity", (T. Pereg-Barnea, W. Witczak-Krempa), October 2023.

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

FUENTES, R. "Hydrodynamics of convection with composition gradients: Salty water and Jupiter", (A. Cumming), February 2023.

GAMBINI, G., "A dark matter candidate in the context of physics beyond the standard model", (J. Cline), February 2023.

HEFFERNAN, M., "Quantification of the Quark-Gluon Plasma with Statistical Learning", (C. Gale), February 2023.

JREIDINI, P., "Novel developments in phase-field crystal modeling for the solidification of complex materials", (N. Provatas), February 2023.

JUTRAS-DUBÉ, L., "Geometric models of embryonic pattern formation and of genetic oscillator synchronization", (P. Francois), February 2023.

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

LI, Z., "Search for a fermiophobic charged Higgs boson in proton-proton collisions with the ATLAS detector", (F. Corriveau, A. Warburton), February 2024.

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

MATTE, D., "Ultrafast electron cold field emission from a tungsten nanotip by single cycle THz pulse", (D. Cooke), February 2023.

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), February 2024.

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

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

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

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

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

PUEL, M., "Topics beyond the standard cosmological model", (J. Cline), February 2024.

SAHA, S., "Search for a new light particle produced in association with a top quark pair with the ATLAS Detector", (S. Robertson), February 2023.

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

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

ZAHRAEE, Z., "Analytical Bootstrap of Conformal Field Theory", (S. Caron-Huot), February 2024.

ZENG, L., "Organization, Mixing, and Demixing of Semiflexible Polymer Chains in Nanochannels Under Nonequilibrium Compression", (W. Reisner), February 2024.

SIMON FRASER UNIVERSITY

GHEIDI, S., "Muon Spin Relaxation Studies of Cuprates in the Normal State", (J. Sonier), June 2022, now an Associate Data Scientist at Euromonitor International, Chicago, Illinois, USA.

LATHOUWERS, E., "Energy and information flows in strongly coupled rotary machines", (D. Sivak), June 2022, now a Data Scientist at AbCellera, Vancouver, BC, Canada.

LEHMANN, K., "Estimating Deceiving Signatures and their Role in the Observation of the VBF Production Mode in the Higgs-Boson Decay into two W Bosons", (B. Stelzer), June 2022, now a Quantum Engineer at Orange Quantum Systems, Delft, South Holland, Netherlands.

OZDEMIR, U., "Phenomenology of Unconventional Superconductors", (D. Broun), October 2022, searching for employment.

SAHA, T., "Information-Powered Engines", (J. Bechhoefer), October 2022, now an Associate Test Engineer at MKS Instruments, Richmond, BC, Canada.

TORONTO METROPOLITAN UNIVERSITY

MANKOVSKII, G., "Gold Nanoparticle Quantification with Total Reflection X-Ray Fluorescence", (A. Pejovic-Milic), June 2022, currently unemployed.

MOSLEMI, A., "Quantitative Computed Tomography Imaging and Machine Learning for Evaluating Chronic Obstructive Pulmonary Disease", (M. Kirby), October 2022, pursuing a Postdoctoral Fellowship at Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada.

ZHAO, N., "Decorrelated Compounding in Ultrasound Images", (Y. Xu), October 2022, pursuing a Postdoctoral Fellowship at Toronto Metropolitan University, Toronto, Ontario, Canada.

UNIVERSITY OF BRITISH COLUMBIA OKANAGAN

DENG, XINCHEN, "Machine Learning Assisted Raman Spectroscopy for Monitoring Radiation Treatment Response in Cancer Cells and Tissues", (A. Jirasek), Summer 2022, searching for employment.

UNIVERSITY OF GUELPH

ANNETT, S., "Commissioning a Novel Quad Near Field Detector for High Energy X-Ray Diffraction Microscopy with Preliminary Applications to an Aluminum Alloy ", (S. Kycia), June 2022, Postdoctoral Fellowship, University of Guelph, Guelph, ON, Canada.

LEE, D., "Development of Dynamical Self-Consistent Field-Theory for Active Rods and its Application to Finger-Like Pattern Formation in Bacteria Colonies at a Glass-Agar Interface", (R. Wickham), June 2022, Quantitative Analyst, Deloitte, Toronto, ON, Canada.

LYU, Z., "Topics in Compact Object Astrophysics and Fundamental Physics with Current and Future Gravitational Wave Observations", (H. Yang), October 2022, Postdoctoral Fellowship, Peking University, Beijing, P.R. China.

PARG, R., "Micropipette Deflection and Constrained Blister Measurements of Agar-Glass Adhesion", (J. Dutcher), October 2022, searching for employment.

UNIVERSITY OF MANITOBA

RAHMAN, S., "Using Parity-Violating Weak Interaction to Measure Neutron Matter Density and Search for New Physics", (J. Mammei), February 2022, pursuing Postdoctoral Fellow, University of Manitoba, Department of Physics and Astronomy, Winnipeg, Manitoba, Canada.

SICIARZ, P., "Investigation of Adaptive Radiation Therapy Including Deformable Image Registration, Treatment Planning Modification Strategies, Machine Learning & Deep Learning", (B. McCurdy), February 2022, pursuing Postdoctoral Fellow, CancerCare Manitoba, Winnipeg, Manitoba, Canada.

UNIVERSITY OF NEW BRUNSWICK

ADAIR, A., "Advancing Pure Phase Encoded MRI Measurement of Flow", (B. Newling), May 25, 2022.

GAUTHIER, A., "Characterizing and Quantifying Turbulent Flow using Magnetic Resonance", (B. Newling), May 25, 2022.

ZARRINGHALAM, H., "High-Resolution Laser and Far-Infrared Fourier Transform Synchrotron-Based Spectroscopy of Selected Molecules", (D. Tokaryk, A. Adam), Oct 13, 2022.

UNIVERSITY OF OTTAWA / UNIVERSITÉ D'OTTAWA

ALSAIARI, F., "Manipulation of Phase and Polarization with Liquid Crystal Technology and its Application in Advanced Optics", (Ebrahim Karimi), January 2022, Assistant Professor at the University of Hafr Al Batin, Kingdom of Saudi Arabia.

BODDISON-CHOUINARD, J., "Gated Quantum Structures in Two-Dimensional Semiconductors", (A. Lucian-Mayer), November 2022, Postdoctoral Fellow at the University of Ottawa.

BROWN, G. G., "Attosecond *In Situ* Measurement and Recombination", (Paul Corkum), January 2022, Postdoctoral fellow in the Max Born Institute in Berlin, Germany.

FLOREZ GUTIERREZ, J., "Optical parametric amplifications: from nonlinear interferometry to black holes", (Jeff Lundeen), March 2022, R&D scientist at Quantinuum, a quantum computing company in London UK.

HE, L., "DNA Nanostructures for Nanopore-based Digital Assays", (Vincent Tabard-Cossa), August 2022, Postdoctoral Fellowship at Harvard U, Boston USA (Wyss Institute with Prof. Peng Yun).

HIRBODVASH, Z., "Long Range Surface Plasmon Waveguides for Electrochemical Detection", (Pierre Berini), October 2022, Currently employed in the artificial intelligence and machine learning industry.

MOBINI, E., "Mechanisms of Enhancement of Nonlinear Optical Interactions in Nonlinear Photonic Devices based on III-V Semiconductors", (Ksenia Dolgaleva), August 2022, software engineer at Optiwave Inc.

PARKS, A., "Role of U(1) Gauge Symmetry in the Semiconductor Bloch Equations", (Thomas Brabec), October 2022, Postdoctoral Research Associate, Wyant College of Optical Sciences, University of Arizona.

ROBICHAUD, L-E., "k.p. theory for wurtzite InGaN quantum dot arrays with applications to ratchet band solar cells", (Jacob Krich), January 2022, Quantum Researcher at Quantum Bridge Technologies, Toronto.

ROSE, P. A., "Algorithms for efficient calculation of nonlinear optical spectra: Ultrafast Spectroscopy Suite and its applications", (Jacob Krich), March 2022, Postdoctoral Fellow at University of Ottawa, Ottawa.

RYCZKO, K., "Accelerating the Computation and Design of Nanoscale Materials with Deep Learning", (Isaac Tamblyn), December 2021, Machine Learning Scientist at Sandbox.

TIESSEN, C. J., "Optimization of a Cesium-Sputter Ion Source for use in Accelerator Mass Spectrometry", (William Kieser), March 2022, Researcher at IONPLUS AG, Dietikon (near Zurich), Switzerland.

UNIVERSITY OF TORONTO

ADAMEK, L., "A Search for the H → μμ Decay and a Measurement of the Mass of the Higgs Boson Using H → 4l Events With 139 fb-1 of Proton-Proton Collision Data Collected by the ATLAS Experiment", (P. Savard), March 2022, now a Data Analyst, Ceridian, Toronto, ON, Canada.

BONSMA-FISHER, M.J., "Population Dynamics of CRISPR Adaptive Immunity in Communities of Bacteria and Phages", (S. Goyal), November 2022, now pursuing a Postdoctoral Fellowship, Data Sciences Institute, University of Toronto, Toronto, ON, Canada.

CARTER, J.W.S., "Luminosity Studies and a Search For Heavy Resonances Decaying into a Pair of Z Bosons with the ATLAS Detector", (P. Krieger), November 2022, now a Software Engineer, Intel Corporation, Toronto, ON, Canada.

CIUNGU, B.M., "Studies of the Higgs Boson Properties in √s = 13 TeV pp Collisions.", (R.S. Orr), June 2022, searching for employment.

DAOUD, H., "Theoretical and Experimental Advances in Studying the Ultrafast Dynamics of Atoms and Molecules", (R.J.D. Miller), June 2022, pursuing a Postdoctoral Fellowship, University of Toronto, Toronto, ON, Canada.

FERRETTI, H., "Quantum Parameter Estimation in the Laboratory", (A.M. Steinberg), March 2022, now an Analyst - Rotation Program in Sales and Trading, National Bank of Canada, Montréal, QC, Canada.

GRYBA, S.K., "From Dark Matter to Leptoquarks: Phenomenology of Physics beyond the Standard Model", (D. Curtin), November 2022, searching for employment.

HE, T., "Mitigating Model Errors in Chemical Data Assimilation: Application of New Data Assimilation and Machine Learning Approaches", (D.B.A. Jones), November 2022, now pursuing a Postdoctoral Fellowship, University of Washington, Seattle, WA, U.S.A.

HIRASAWA, H., "Atmosphere and Ocean Components of the Sahel Climate Response to Aerosol Forcing", (P.J. Kushner), November 2022, now pursuing a Postdoctoral Fellowship, University of Victoria, Victoria, BC, Canada.

HUO, Y., "High Resolution Climatological Simulations for South and Southeast Asia and the Tibetan Plateau", (W.R. Peltier), November 2022, now pursuing a Postdoctoral Fellowship, University of Toronto, Toronto, ON, Canada.

INGLIS-WHALEN, M., "Power Corrections and Rapidity Logarithms in Soft-Collinear Effective Theory", (M.E. Luke), June 2022, self-employed and searching for employment.

JEFFERY, P.S., "Water Vapour and Ozone: Measuring Key Trace Gases in Challenging Regions", (K.A. Walker), June 2022, now Research Associate, MOPITT, University of Toronto, ON, Canada.

MIRSANAYE, K., "Digital Histopathology with Second-Harmonic Generation Microscopy", (V. Barzda), November 2022, searching for employment.

NUNN, C.J., "Mitochondrial Genome Dynamics in Yeast: How Mutation and Selection Inform the Fate of a Dispensable Genome", (S. Goyal), November 2022, searching for employment.

PEN, U.-Y., "An Automated Tabletop Continuous Culturing System with Multicolor Fluorescence Monitoring for Microbial Gene Expression and Long-Term Population Dynamics", (S. Goyal), June 2022, searching for employment.

SARRACINI, A., "Time-Resolved Electron and Serial X-Ray Crystallography of PbS Quantum Dots and Biomolecules", (R.J.D. Miller), November 2022, now a Postdoctoral Researcher, Paul Scherrer Institute, Villigen, Aargau, Switzerland.

SMART, M.R., "Collective Dynamics of Interacting Cell Types", (A. Zilman), November 2022, now pursuing a Postdoctoral Fellowship ("Flatiron Research Fellow") at the Flatiron Institute in New York, NY., U.S.A.

SPIERINGS VAN DER WOLK, D., "Precise Larmor Time Measurements of a Tunneling Bose-Einstein Condensate", (A.M. Steinberg), March 2022, pursuing a Mitacs Industrial Postdoctoral Fellowship at the University of Toronto and Entangled Networks, Toronto, ON, Canada.

TOWSTEGO, T., "Study of Neutrino Oscillations with Enhanced Selection of Electron Neutrino Interactions", (H.A. Tanaka), November 2022, now Patent Engineer, Xanadu, Toronto, ON, Canada.

TRETYAKOV, I., "Signal Processing and Instrument Characterization on a Large-N Radio Interferometer", (K. Vanderlinde), November 2022, now an AI/ML researcher, Lockheed Martin, Orlando, FL, U.S.A.

VENU, V., "Strongly Interacting Fermions in a Multi-Orbital Optical Lattice", (J.H. Thywissen), November 2022, now pursuing a Postdoctoral Fellowship, Quantum Valley Ideas Lab, Waterloo, ON, Canada.

WILSON, M.J., "A New Search for Low-Mass Dark Matter and an Examination and Reduction of the Uncertainty due to the Photoelectric Absorption Cross Section Using a Cryogenic Silicon Detector with Single-Charge Sensitivity", (M. Diamond), June 2022, pursuing a Postdoctoral Fellowship at Karlsruhe Institute für Technologie in Karlsruhe, Germany.

YANG, B., "Physical Processes in Ice-covered Lakes", (M.G. Wells), June 2022, now pursuing a Postdoctoral Fellowship, University of Victoria, Victoria, BC, Canada.

ZHANG, C., "Interacting Electronic Orders in Cuprate Heterostructures and Praseodymium-doped Cuprate Thin Films" (J.Y.T. Wei), November 2022, searching for employment.

ZHONG, X., "Experimental Quantum Communication Based on Sagnac Interferometers", (H.K. Lo), June 2022, now a senior consultant at Ernest & Young, Toronto, ON, Canada.

UNIVERSITY OF VICTORIA

AYDIN, D., “Sensing and Emission in Optical Cavities”, (P. Loock), November 2021.

HIGGS, C., “Dwarfs Among Giants: Exploring Environmental Impacts on Dwarf Galaxies with the Solo Survey”, (A. McConnahie, K. Venn), November 2021, now an Astronomy Outreach Specialist for the Education & Public Outreach Team, Rubin Observatory, Tuscon, Arizona, USA.

MACDONELL, D., “Search for Dark Matter Produced in pp Collisions with the ATLAS Detector”, (R. Sobie, R. Kowaleski), May 2022, now a postdoc impact fellow at MIT Climate & Sustainability Consortium, Cambridge, MA, USA.

MALDONADO, M., "Comprehensive Ionization Model Development for the FEBIAD Ion Source and Its Application for TRIUMF's Radioactive Ion Beam Program", (A. Gottberg, D. Karlen), July 2022, searching for employment.

PECK, R., “Nanoplasmonics with Dispersive and Lossy Media”, (R. Gordon, A. Brolo), May 2022, searching for employment.

RENNEHAN, D., “Simulating the Universe: The Evolution of the Most Massive Galaxies”, (A. Babul), April 2022, now a Flatiron Research Fellow at the Center for Computational Astrophysics, Flatiron Institute, New York, NY, USA.

TAHERI NIEH, M., “Advanced Wavefront Sensing and Astrometric Techniques for the Next Generation of Extremely Large Telescopes”, (D. Andersen, K. Venn), April 2022, now with Laboratoire d'Astrophysique de Marseille and Keck Observatory, Waimea, HI, USA.

THORP, M., "A Multifaceted Investigation of the Resolved Properties of Galaxy Mergers", (S. Ellison), November 2022, now a postdoctoral associate at the University of Bonn, Bonn, Germany.

TRUDEAU, A., "Galaxy Populations in Distant, X-ray Selected Clusters of Galaxies", (J. Willis), August 2022, now a postdoctoral associate at the University of Florida, Gainsville, Florida, USA.

UNIVERSITY OF WATERLOO

BÉJANIN, J., "Advances in Superconducting Circuit Quantum Electrodynamics", (M. Mariantoni, J. Martin), June 2022.

CAYUSO, J., "Studying the Largest Scales in the Universe with the Kinetic Sunyaev-Zel'dovich Effect", (M. Johnson, N. Afshordi), June 2022.

CHUNG, K., "Hodge Theory for Geometrically Frustrated Magnetism", (M. Gingras), June 2023 (degree complete in 2022).

DELMASTRO, D., "Non-Perturbative Aspects of Gauge Theories", (J. Gomis), October 2022.

GIRI, U., "Reconstructing Cosmic Velocities with the Kinetic Sunyaev-Zeldovich Effect", (K. Smith), June 2022 (degree complete in 2021).

GONDA, T., "Resource Theories as Quantale Modules", (F. Girelli), June 2022.

GRAY, F., "Symmetries in Black Hole Spacetimes", (D. Kubizňák, R. Mann), June 2023 (degree complete in 2022).

GUNDERMAN, L., "Collective Spin-Cavity Ensembles and the Protection of Higher-dimensional Quantum Information", (D. Cory), June 2023 (degree complete in 2022).

HAN, L., "Line-Scan Spectral-Domain Optical Coherence Tomography for Cellular Resolution Structural and Vascular Imaging of Biological Tissues", (K. Bizheva), October 2022.

JAI-AKSON, P., "Edge Modes and Carrollian Hydrodynamics on Stretched Horizons", (L. Freidel, R. Myers), June 2023 (degree complete in 2022).

KAN, A., "Quantum Computational Particle Physics: Algorithms, Resource Estimation, and Model-Building", (C. Muschik), June 2022.

LEE, Y. S., "Devices for Satellite-Assisted Quantum Networks", (T. Jennewein), June 2022 (degree complete in 2021).

LIN, J., "Security Analysis of Quantum Key Distribution: Methods and Applications", (N. Lütkenhaus), June 2022 (degree complete in 2021).

MELEK, M., "Mitigating Fiber Nonlinearity with Machine Learning", (D. Yevick), June 2022.

MUKHERJEE, S., "Selected topics in Computational Relativity", (E. Schnetter, A. Broderick), October 2022.

SACHS, A. M., "The Unruh-DeWitt Detector Model: Modified Dispersion and Nonlinear Couplings", (R. Mann, A. Kempf), June 2022 (degree complete in 2021).

SAKHARWADE, N., "An Operational Road towards Understanding Causal Indefiniteness within Post-Quantum Theories", (L. Hardy, A. Kempf), June 2022.

SHI, Y., "Molecular Beam Epitaxial Growth of InSb Quantum Well Heterostructures for Applications in Topological Quantum Computing", (Z. Wasilewski), June 2022 (degree complete in 2021).

SPITZER, I., "Topics in Weak Gravitational Lensing", (M. Hudson), June 2022.

TANSUWANNONT, T., "Flags and Error Weight Parities: A Development of Fault-tolerant Quantum Computation with Few Ancillas", (D. Leung), June 2022 (degree complete in 2021).

XI, C., "Advancing Techniques for Detecting Dwarf Satellite Populations Beyond the Local Group", (J. Taylor), October 2022.

YANG, B., "Tunneling Transport and Spectroscopy of Two-Dimensional Magnetic Materials", (A. Tsen), October 2022.

ZHOU, Y., "Twisted Holography: The Examples of 4d and 5d Chern-Simons Theories", (K. Costello, J. Gomis), June 2023 (degree complete in 2022).

WESTERN UNIVERSITY

DAS, I., "The Role of Nonideal Magnetohydrodynamic Effects, Gravitational Instability, and Episodic Accretion in Star-Formation", (S. Basu), October 2022, pursuing Postdoctoral Fellowship at Academia Sinica Institute of Astronomy and Astrophysics at Taipei, Taipei City, Taiwan, Republic of China.

GETANGAMA, N., "Electrical and Mechanical Properties of Polymer Nanocomposites", (J. Hutter, J. de Bruyn), October 2022, Laboratory Technician at Western University, London ON Canada.

WYENBERG, C., "Wideband and Relativistic Superradiance in Astrophysics", (M. Houde), October 2022, pursuing Postdoctoral Fellowship at Institute for Quantum Computing, Waterloo, ON Canada.