

PHD PHYSICS DEGREES AWARDED IN CANADIAN UNIVERSITIES*

DOCTORATS EN PHYSIQUE DÉCERNÉS PAR LES UNIVERSITÉS CANADIENNES*

DECEMBER 2017 TO DECEMBER 2018 / DÉCEMBRE 2017 À DÉCEMBRE 2018

CARLETON UNIVERSITY

- CUDDY, S., "The impact of pinhole collimation on SPECT image noise and spatial resolution", (G. Wells), November 2018.
- DI VALENTINO, D., "Constraining Standard Model and Beyond Standard Model Higgs boson couplings in the four lepton decay channel with the ATLAS detector", (T. Koffas), April 2018.
- DUNFORD, M., "A search for Neutrinoless Double Electron Capture of ^{36}Ar and a Measurement of Specific Activity of ^{39}Ar in Atmospheric Argon with the DEAP-3600 Detector", (K. Graham), August 2018.
- MALKOV, V., "Charged particle transport in magnetic fields in the EGSnrc Monte Carlo code system", (D. Rogers), December 2017.
- OLIVER, P., "Computational cell dosimetry for cancer radiotherapy and diagnostic radiology", (R. Thomson), April 2018.

CONCORDIA UNIVERSITY

- BAHRAMI, M., "Transport and Many-Body Effects in Novel Nanostructures", (P. Vasilopoulos), June 2018, now a Postdoctoral Fellow of Computational Physics in Novel Nanostructures at Nipissing University, North Bay, ON, Canada.
- MCRAE, A.C., "Graphene Quantum Strain Transistors and Two-In-One Carbon Nanotube Quantum Transistors", (A. Champagne), August 2018, now a Software Developer at Trihedral Engineering Limited, Bedford, NS, Canada.
- SON, T.-V., "Ultrafast, Broadband Light Polarization Properties of Vanadium Dioxide Thin Films on Insulating and Metallic Substrates", (T. Vo-Van & A. Haché), December 2018, now a Research Associate at Concordia University and Université de Montréal, Québec, Canada.

DALHOUSIE UNIVERSITY

- CAMPBELL, J., "Measurement of the elastic form factor ratio $\mu\text{GE}/\text{GM}$ using electron scattering

spin asymmetries", (A. Sarty), July 2018, now transitioned into Data Science.

- GLAZIER, S., "Isothermal Micro calorimetry as a Tool to Probe Parasitic Reactions in Lithium-ion Cells", (J. Dahn), July 2018, now a Research Scientist at Novonix, Bedford, NS, Canada.
- KAUR, S., "Determination of Proton radii of Neutron-rich Oxygen Isotopes from Charge-changing Cross section Measurements", (R. Kanungo), July 2018, now searching for employment.
- LI, C., "Trends and Sources of Atmospheric Aerosols Inferred from Surface Observations, Satellite Remote Sensing and Chemical Transport Modeling", (R. Martin), November 2018, now pursuing a Postdoctoral Fellowship at Berkeley, California, USA.
- MACDONALD, R., "Development and Implementation of Trajectory Optimization Technologies for Cranial Stereotactic Radiation Therapy", (C. Thomas), July 2018, now doing clinical medical physics residency at Sunnybrook Health Sciences, Toronto, ON, Canada.
- MARCH, S., "Four-wave mixing solution-processed methylammonium lead iodide ($\text{CH}_3\text{NH}_3\text{PbI}_3$) perovskite thin films", (K. Hall), December 2018, now pursuing a Postdoctoral Fellowship at Dalhousie University, Halifax, NS, Canada.
- XU, J., "Interpreting satellite remote sensing, AIRCRAFT and ground-based observations of aerosol using a chemical transport model", (R. Martin), November 2018, now pursuing a Postdoctoral Fellowship at Dalhousie University, Halifax, NS, Canada.

MEMORIAL UNIVERSITY

- AYOUB, S., "Understanding Intermolecular Interactions in Organic Heterojunction devices with the Use of Density Functional Theory", (J. Lagowski), October 2018, now an Assistant Professor at the Physics Department, King Abdulaziz University, Jeddah, Saudi Arabia.
- KHAJEHPOUR TADAVANI, S., "Electrohydrodynamics: A Study of Collective Behavior and Self-organization of an Oil-in-Oil Emulsion", (A. Yethiraj), October 2018, now pursuing a Postdoctoral Research Fellow at the Department of Physics and Physical Oceanography, Memorial University, NL, Canada.
- MALEK, S., "Thermodynamic and Structural Anomalies of Water Nanodroplets from

Computer Simulations", (I. Saika-Voivod & P. Poole), October 2018, now an Instructional Assistant at the Department of Physics and Physical Oceanography, Memorial University, NL, Canada.

- PALIT, S., "Macromolecular Dynamics and Structure in Crowded and Confined Environments", (A. Yethiraj), October 2018, now an Assistant Professor at the Department of Mathematics and Physics, North South University, Bashundhara, Dhaka, Bangladesh.
- SBEIH, S., "Deuterium Nuclear Magnetic Resonance (NMR) and Rheology of Microgel Colloids at Ambient and High Pressure", (M. Morrow & A. Yethiraj), June 2018, now an Assistant Professor at the Physics Department, School of Basic Sciences and Humanities, German Jordanian University, Amman, Jordan.

POLYTECHNIQUE MONTRÉAL

- BEJAOU, N., "Adaptation du modèle FEEDBACK pour évaluer les propriétés neutroniques d'un nouveau cœur CANDU SCWR en géométrie hexagonale", (G. Marleau), Novembre 2018, maintenant à la recherche d'un emploi.
- CHAGNON, D., "Encapsulation hermétique de microbolomètres pour pour caméras infrarouges : optimisation et étude in situ de l'instabilité des infrafaces", (O. Moutanabbir), Janvier 2018, maintenant à la recherche d'un emploi.
- LAMBIN IEZZI, V., "Conception de laser et capteur distribué de température par cascade d'ondes Stokes Brillouin stimulées", (R. Kashyap), Avril 2018, maintenant associé de recherche à Polytechnique Montréal, Montréal, Québec, Canada.
- LAVOIE, P., "Croissance et caractérisation de l'alliage $\text{GaAs}_{1-x}\text{Bi}_x$ par épitaxie par jets moléculaires", (P. Desjardins/S. Francoeur), Novembre 2018, maintenant à la recherche d'un emploi.
- LORANGER, S., "Discovery and Correction of Spatial Non-Uniformity in Optical Fibers: Towards the Fabrication of Perfect Ultra-Long Fiber Bragg Gratings for Applications in Non-Linear Optics", (R. Kashyap), Janvier 2018, maintenant suis une Postdoctorale à Max Planck Institute, Erlangen, Germany.
- LU, X., "Piezoelectric Fibers for Sensing and Energy Generation", (M. Skorobogatiy), Septembre 2018, maintenant à la recherche d'un emploi.
- POUGOUM, F., "Development of Fe_3Al -Based HVOF Coatings for Wear Resistant

*This list includes all information submitted to the CAP office up to 21 January 2019.

*La liste comprend l'information reçue au bureau de l'ACP jusqu'au 21 janvier 2019.

Applications”, (J.-E. Klemberg-Sapieha, L. Martinu & R. Schulz), Février 2018, maintenant suis une Postdoctorale à Polytechnique Montréal, Montréal, QC, Canada.

SOUZA BARACHATI, F., “Optical Nonlinearities in the Strong Light-Matter Coupling Regime”, (S. Kéna-Cohen), Novembre 2018, maintenant à la recherche d’un emploi en Allemagne.

QUEEN’S UNIVERSITY

CHAUDHURI, A., “Nanoelectromechanical Studies of Suspended Resonators using Graphene grown by Chemical Vapour Deposition”, (R. Knobel), December 2017, now a Semiconductor Physics Specialist, Avalon Holographics, St. John’s, NL, Canada.

CHEQUERS, M., “The Evolution of Star Formation Activity in Cluster Galaxies Over $0.15 < z < 1.5$ ”, (L. Widrow), July 2018, now a Data Science Intern, Shopify, Waterloo, ON, Canada.

CLARK, M., “Cryogenic Alkali Halide Scintillators for Rare-Event Searches”, (P. Di Stefano), August 2018, now a Postdoctoral Researcher (Xenon experiment), Purdue University, Lafayette, IN, USA.

MAZAHARI, L., “Self-organization and Light-induced Chirality in Azoglass Material”, (J.-M. Nunzi), April 2018, now a Postdoctoral Researcher, Western University, ON, Canada.

MIRZAEI, S., “Studies on Optically Induced DC-Voltage in Thin Film Structures”, (J.-M. Nunzi), December 2018, now a Postdoctoral Researcher, Queen’s University, ON, Canada.

NORTHEAST, D., “Investigating electromechanical coupling between membrane crystal materials and superconducting microwave resonators”, (R. Knobel), July 2018, now a Postdoctoral Researcher, National Research Council of Canada, Ottawa, ON, Canada.

SICK, J., “The Andromeda Optical and Infrared Disk Survey”, (S. Courteau), January 2018, now a Research Associate, Large Synoptic Survey Telescope, Tucson, AZ, USA.

WAGNER, C., “The Quenching of Cluster Galaxies”, (S. Courteau), August 2018, now a Research Associate, Bruyère Research Institute, Ottawa, ON, Canada.

SIMON FRASER UNIVERSITY

ARORA, M., “Origin of perpendicular magnetic anisotropy in Co/Ni multilayers and their use in STT-RAM”, (E. Girt), December 2017, now a PREP Scientist in the Quantum Electromagnetic Division at The National Institute of Standards and Technology (NIST), Boulder, Colorado, USA.

FARRÉ PÉREZ, P., “Predictive models for chromatin folding: connecting sequence to structure”, (E. Emberly), April 2018, now an applied

algorithm researcher at D-Wave Systems, Burnaby, BC, Canada.

HORTON, A.J., “In-situ measurement of the jet energy scale and studies of jet structure at ATLAS”, (M. Vetterli), December 2017.

NIROOMAND, D., Spin transport in an ultra-cold trapped non-condensed ^{87}Rb gas, (J. McGuirk), September 2018.

TAVAKOLI DINANI, R., “Observation of critical spin dressing”, (M. Hayden), April 2018, now pursuing a Postdoctoral Fellowship at Institute for Nuclear and Radiation Physics, Leuven, Flemish Brabant, Belgium.

VAHDANI, P., “Morphological studies of bulk heterojunction films made of polymers showing stable photovoltaic properties”, (B. Frisken), August 2018.

TRENT UNIVERSITY

AMIRI, N., “Tracking the fate of ambient SO_2 using sulfur isotopes, oxidant mixing ratios, and hydrocarbon mixtures”, (A.-L. Norman), June 2019.

KHALID, A., “Multi-Mode Multi-Photon Interferometry Applications for Quantum Information Processing”, (B. Sanders), November 2018.

MAYER, A., “Study of the decay of Zr-96 by isotope geochemistry and Penning trap mass spectrometry”, (R.I. Thompson), June 2018.

MILLER, K., “Study of the decay of Zr-96 by isotope geochemistry and Penning trap mass spectrometry ‘Application of copper isotope abundance measurements to study copper trafficking *in vivo*’”, (M. Wieser), November 2018, now pursuing a Postdoctoral Fellowship at the University of Calgary, Calgary, AB, Canada.

OUYED HERNANDEZ, A., “The neutrino sector in hadron-quark combustion: physical and astrophysical implications”, (R. Ouyed), June 2019.

PALITTAPONGARNPIM, P., “Reinforcement Learning for Adaptive Quantum-channel Control”, (B. Sanders), June 2019.

RASLAN, AMANY, K., “The Role of Dielectric Screening in SrTiO_3 -Based Interfaces”, (B. Atkinson), December 2018, now a Sessional Instructor at University of Ontario Institute of Technology, Oshawa, ON, Canada.

TAHANI, K., “Characterizing Star Forming Clumps in the Galaxy: A Comparison of JCMT and Herschel Observations”, (R. Plume), November 2018, now an Instructor at Kwantlen Polytechnic University, Surrey, BC, Canada.

UNIVERSITY OF CALGARY

WATT, E., “Development of post-implant analysis methodologies for permanent breast seed implant”, (W. Smith), November 2018.

UNIVERSITÉ SHERBROOKE

ACHECHE, S., “Effets des corrélations électroniques et du champ magnétique dans les semi-métaux de Weyl”, (A.-M. Tremblay), Janvier 2019, maintenant à la recherche d’un emploi.

COLLIGNON, C., “De la densité des fluides électroniques dans deux oxydes supraconducteurs”, (L. Taillefer & K. Behnia), Janvier 2018, maintenant suis une Postdoctorale au Collège de France, Paris, France.

HARVEY-COLLARD, P., “Qubits de spin composés de boîtes quantiques et de donneurs dans le silicium”, (M. Pioro-Ladrière), Mai 2018, maintenant suis une Postdoctorale à l’Université de technologie de Delft, Delft, Pays-Bas.

IYER SRIDHARAN, P., “A critical analysis of quantum error correction methods for realistic noise processes”, (D. Poulin), Novembre 2018, maintenant suis une Postdoctorale à IQC de l’Université de Waterloo, Waterloo, Ontario et à Quantum Benchmark, Kitchener, ON, Canada.

LACHANCE-QUIRION, D., “Dispositifs quantiques hybrides basés sur les systèmes de spins et les circuits supraconducteurs”, (M. Pioro-Ladrière), Mars 2018, maintenant suis une Postdoctorale à l’Université de Tokyo, Tokyo, Japon.

MICHON, B., “Point critique quantique de la phase pseudogap dans les cuprates supraconducteurs”, (T. Klein, C. Marcenat & L. Taillefer), Janvier 2018, maintenant suis une Postdoctorale à l’Université de Genève, Genève, Suisse.

RINKEL, P., “Dynamique du réseau dans les semi-métaux de Weyl sous champ magnétique”, (I. Garate), Janvier 2019, maintenant à la recherche d’un emploi en industrie.

VERRET, S., “Rôle des ondes de densité dans les modèles théoriques pour cuprates supraconducteurs”, (A.-M. Tremblay), Avril 2018, maintenant suis une Postdoctorale à Mila (Université de Montréal), Montréal, QC, Canada.

UNIVERSITY OF ALBERTA

BARTHVAL, H., “Integrated Microseismic Analysis: From Relocation to Advanced Geomechanical Interpretation”, (M. van der Baan), June 2018.

BELTAOS, A., “Optoelectronic Properties of Graphene: Light Interaction and Emission”, (A. Meldrum, A. Bergren), June 2018.

CHEN, K., “Elastic Least-squares Reverse Time Migration and Elastic Gauss-Newton Full-waveform Inversion”, (M. Sacchi), November 2018.

CHEN, Y., “Seismic imaging of lithosphere structures of the Western Canada Sedimentary Basin”, (Y. Gu), November 2018.

FIRDOUS, T., “Nanomechanical and Optomechanical Torque Magnetometry of Isolated Nanomagnetic Assemblies”, (D. Potter), November 2018.

ISLAM, M.S., “Piezoelectric and Dielectric Properties of LiNbO₃, PMN-PT, and PZT-5A Materials at Cryogenic Temperatures”, (J. Beamish), November 2018.

MCCELROY, T., “Dark Matter Search With The First Year Of Data From The DEAP-3600 Experiment”, (D. Grant, A. Hallin), November 2018.

MCPHEE, K., “Relaxometry in the Human Brain Using High Field Magnetic Resonance Imaging”, (A. Wilman, J. Tuszynski), June 2018.

MEKARSKI, P., “Electron Antineutrinos in the Water Phase of the SNO+ Experiment”, (C. Krauss), November 2018.

MITRA, P., “PICO-60: A Dark Matter Search Experiment with C3F8 in a Bubble Chamber”, (C. Krauss), June 2018.

PETROV, P., “Characterization of Magnetic Nanoparticles as Contrast Agents and Their Application for Quantitative Magnetic Susceptibility Monitoring of the Waterflooding of Heavy Oil in Real Time”, (D. Potter), June 2018.

RABBANI, A., “Ultrasonic Characterization of Bitumen with Pressure and Temperature: Implications for Seismic Monitoring of the Grosmont Formation”, (D. Schmitt), November 2018.

TETARENKO, A., “Constraining the Physics of Relativistic Jets with Radio Through (Sub-) Millimetre Properties of X-Ray Binaries”, (G. Sivakoff), November 2018.

TETARENKO, B., “Constraining the Physics of the X-ray Irradiated Accretion Discs in Low-mass X-ray Binaries with Observations”, (G. Sivakoff), November 2018.

WANG, C., “Numerical Modeling of Drift Resonance and Drift-Bounce Resonance Between Ultra-Low Frequency Waves and Energetic Particles in the Inner Magnetosphere”, (R. Rankin), November 2018.

WANG, R., “Source Analysis of Induced Earthquakes in the Western Canada Sedimentary Basin”, (Y. Gu), November 2018.

WOOD, T., “Characterizing the Atmospheric Neutrino Spectrum with the IceCube Neutrino Observatory”, (D. Grant), November 2018.

UNIVERSITY OF BRITISH COLUMBIA

BALANDEH, S., “Experimental and theoretical study of the electronic structure of single-crystal BaBiO₃”, (G. Sawatzky), August 2018.

BERKMAN, S., “ $\nu\mu$ CC1 π^+ Events Produced in the T2K Beam at Super-Kamiokande”, (H. Tanaka), April 2018.

BERNIER, N., “Decay spectroscopy of neutron-rich cadmium around the N = 82 shell closure”, (R. Kruecken), December 2018.

CHAURETTE, L., “Infrared quantum information”, (G. Semenoff), August 2018.

CONTRERAS, D., “Searching for hemispheric asymmetry and parity violation with the cosmic microwave background”, (D. Scott), August 2018.

GORDON, J., “Applications of path integral localization to gauge and string theories”, (G. Semenoff), April 2018.

GRANADOS CONTRERAS, A., “Orbital outcomes of STIPs and consequences for hot-Jupiter formation and planet diversity”, (A. Boley), November 2018.

HENKELMANN, S., “Searches for heavy vector-like quarks decaying to high transverse momentum W bosons and top- or bottom-quarks and weak mode identification with the ATLAS detector”, (A. Lister), August 2018.

KIM, J., “Searching for multi-nucleon processes in neutrino interactions by proton identification in the fine-grained detectors for T2K”, (H. Tanaka), August 2018.

MANNING, A., “T1 relaxation and inhomogeneous magnetization transfer in brain: physics and applications”, (C. Michal), December 2018.

MARCHETTO, M., “Magnetic field study for a new generation high resolution mass separator”, (L. Merminga), December 2017.

MIORELLI, M., “Electromagnetic properties of medium-mass nuclei from coupled-cluster theory”, (R. Kruecken), December 2017.

PARKER, A., “Microscopic origins of the mechanical response of nanostructured elastomeric materials”, (J. Rottler), December 2017.

POLOVY, G., “Optical synthesis and ultracold reactions of triplet ⁶Li molecules”, (K. Madison), August 2018.

SOUS, J., “Peierls bipolarons and localization in solid-state and molecular systems”, (M. Berciu), December 2018.

WANG, Q., “Gravity of quantum vacuum and the cosmological constant problem”, (W. Unruh), July 2018.

WHITE, J., “Characterizing debris discs in the late stages of planet formation”, (A. Boley), July 2018.

YE, H.-C., “Emergent spacetime in matrix models”, (J. Karczmarek), December 2018.

ZHU, Z., “Excitonic Modes and Phonons in Biological Molecules”, (P. Stamp), April 2018.

UNIVERSITY OF GUELPH

DUNLOP, M., “High-Precision Half-Life Measurements for the Super allowed Fermi β^+

Emitters ¹⁰C and ²²Mg”, (C.E. Svensson), September 2018.

UNIVERSITY OF LETHBRIDGE

HASHEMI, R., “Remote Sensing (Spectroscopy): High Resolution Spectroscopic Study of Atmospheric Trace Gases with Climate Research Application”, (B. Billinghurst), November 2018.

UNIVERSITY OF OTTAWA

BART, G., “Bridging the Microscopic and Macroscopic Realms of Laser Driven Plasma Dynamics”, (T. Brabec), October 2018.

CHAGNON-LESSARD, S., “Cellular responses to complex strain fields studied in microfluidic devices”, (M. Godin & A. Pelling), October 2018.

CHERITON, R., “Design and Characterization of InGaN/GaN Dot-in-Nanowire Heterostructures for High Efficiency Solar Cells”, (K. Hinzer), October 2018.

DING, X., “Increasingly complex systems in intense laser fields”, (P. Corkum), December 2018.

GULLEKSON, C., “Effect of Cell-Substrate Interactions on Epithelial Cell Mechanics”, (J. Harden & A. Pelling), October 2018.

KUCHAR, J., “How water, ice, and sediment deform the Earth: Novel developments and applications of models of glacial isostatic adjustment”, (G. Milne), December 2018.

UNIVERSITY OF REGINA

KOLACEKE, A., “Application of Synchrotron Radiation Techniques to the Study of Taphonomic Alterations and Preservations in Fossils”, (M. Barbi), December 2018, now a Quantitative Analyst at BNP Paribas, Lisbon, Portugal, Spain.

PAUDYAL, D., “Spin Polarizability of a Proton Using Polarized Photon Beam and Polarized Butanol Target at Mainz Microtron”, (G. Huber), September 2017.

UNIVERSITY OF SASKATCHEWAN

GOODWIN, L., “The Consequences of Electric Field Variability and Strength on the High-Latitude Ionosphere”, (J.P. St-Maurice), March 2018, now a Postdoctoral Associate at Boston University, Boston, Massachusetts, USA.

KOSHKAROV, O., “Instabilities, Anomalous Transport, and Nonlinear Structure in Partially and Fully Magnetized Plasmas”, (A. Smolyakov), February 2018, now a Postdoctoral Research Associate at Los Alamos National Laboratory, Los Alamos, New Mexico, USA.

LEEDAHL, B., “The Electronic and Magnetic Effects of 3d External Transition Metal

Impurities in Semi Conductors”, (A. Moewes), August 2018, Now pursuing a Postdoctoral Fellowship at Max Planck Institute for Chemical Solids, Dresden, Germany.

MAJUMDAR, A., “Theoretical Study of Structural Transformations and Properties and Selected Materials at Extreme Conditions”, (J. Tse & Y. Yao), August 2018, now a Postdoctoral Researcher at Uppsala University, Uppsala, Uppsala County, Sweden.

REIMER, A., “Improved SuperDARN Radar Signal Processing: A First Principles Statistical Approach for Reliable Measurement Uncertainties”, (G. Hussey), February 2018, now a Research Engineer at SRI International, Menlo Park, California, USA.

ZAWADA, D., “Tomographic Retrievals of Stratospheric Ozone Mapping and Profiler Suite Limb Profiler”, (A. Bourassa & D. Degenstein), September 2018, now a Postdoctoral Researcher at University of Saskatchewan, Saskatoon, SK, Canada.

UNIVERSITY OF VICTORIA

AL-HAKEEM, E., “Dosimetry at extreme non-charged particle equilibrium conditions using Monte Carlo and specialized dosimeters”, (A. Jirasek & S. Zavgorodni), September 2018, now searching for employment.

BERG, T., “Probing galaxy evolution with quasar absorption lines”, (S. Ellison), June 2018, now pursuing a postdoctoral fellowship at the European Southern Observatory, Chile.

DRAPER, Z., “Understanding the Liveliness and Volatility of Debris Disks: from the microscopic properties to causal mechanisms”, (B. Matthews & K. Venn), August 2018, now a Scientist at Delta-X Research Inc., Victoria, BC, Canada.

FRADETTE, A., “From Gas and Dust to Protostars: Addressing the Initial Stages of Star Formation Using Observations of Nearby Molecular Clouds”, (M. Pospelov), December 2017, now a Consultant at the Boston Consulting Group, Montreal, QC, Canada.

MAIRS, S., “From Gas and Dust to Protostars: Addressing the Initial Stages of Star Formation Using Observations of Nearby Molecular Clouds”, (D. Johnstong & F. Herwig), December 2017, now a Support Astronomer at East Asian Observatory (James Clerk Maxwell Telescope), Hilo, Hawaii, USA.

MAYNARD, E., “Applications of x-ray computed tomography polymer gel dosimetry”, (A. Jirasek & M. Hilts), December 2018, now pursuing Medical Physics residencies.

SPENGLER, C., “Nuclear Star Clusters in the Virgo Cluster of Galaxies”, (P. Côté & J. Willis), November 2018, now a Postdoctoral researcher at Instituto de Astrofísica, Pontifical Catholic University of Chile, Chile.

VAN NEST, S., “Applications of Raman Spectroscopy in Radiation Oncology: Clinical Instrumentation and Radiation Response Signatures in Tissue”, (A. Jirasek), August 2018, now a Postdoctoral Associate at the Department of Radiation Oncology at Weill Cornell Medicine, New York, NY, USA.

UNIVERSITY OF WATERLOO

AL-DAWSARI, S., “Comprehensive Theoretical Studies of Guided Modes in Multilayer Hybrid Plasmonic Waveguides”, (L. Wei & D. Strickland), April 2018, now an Assistant Professor, Physics Department, King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia.

ALTAMIRANO, N., “The quantum and the gravity: Newtonian and Cosmological Applications”, (R. Mann & N. Afshordi), July 2018, now a Data Analyst at Birch Hill Equity Partners, Toronto, ON, Canada.

ANISIMOVA, E., “Single-photon detectors for long distance quantum communications”, (T. Jennewein), January 2018, currently unemployed.

BEDNIK, G., “Topological and superconducting properties of Weyl and Dirac metals”, (A. Burkov), August 2018, now a Postdoctoral Fellow at the University of California, Santa Cruz, CA, USA.

BHARDWAJ, L., “Classifications of Quantum Field Theories”, (D. Gaiotto & R. Myers), June 2018, now pursuing a Postdoctoral Fellowship at Harvard University, Cambridge, MA, USA.

CHAMBERLAND, C., “New methods in quantum error correction and fault-tolerant quantum computing”, (R. Laflamme), October 2018, now a Research staff member, at IBM Thomas J Watson Research, Yorktown Heights, NY, United States.

DELCAMP, C., “Gauge models of topological phases and applications to quantum gravity”, (B. Dittrich & L. Smolin), June 2018, now a Postdoctoral Fellow at the Max Planck Institute for Quantum Optics, Garching bei München, Germany.

GUNTHER, A., “PPLN-based photon pair sources toward biphoton quantum frequency conversion”, (T. Jennewein), August 2018, now currently pursuing a Mitacs Science Policy Postdoctoral Fellowship at Defence Research and Development Canada, Ottawa, ON, Canada.

HAURU, M., “Tensor Networks and the Renormalization Group”, (G. Vidal), August 2018, now a Postdoctoral Researcher at Ghent University, Ghent, Belgium.

HENNIGAR, R., “Explorations in black hole chemistry and higher curvature gravity”, (R. Mann), August 2018, now currently holding a Banting Postdoctoral Fellowship at Memorial University of Newfoundland, St. John’s, NF, Canada.

KARAMI, M., “Probing the dark universe with gravitational lensing”, (N. Afshordi & A. Broderick), September 2018, now a Manager, Market Risk Measurement, Scotiabank, Toronto, ON, Canada.

MAZUREK, M., “Testing classical and quantum theory with single photons”, (K. Resch), January 2018, now a Postdoctoral Associate at CU Boulder, Boulder, CO, USA.

MCRAE, C.R., “Indium Thin Films in Multilayer Superconducting Quantum Circuits”, (M. Mariantoni & R. Laflamme), January 2018, now pursuing a Postdoctoral Fellowship at the National Institute of Standards and Technology, Boulder, CO, USA.

MORADI, H., “Topological Order and Universal Properties of Gapped Quantum Systems”, (X.-G. Wen & R. Melko), November 2018, now a Postdoctoral Researcher at The University of Cambridge, Cambridge, United Kingdom.

NIKNAM, M., “Dynamics of Quantum Information of the Central Spin Problem”, (D. Cory), January 2018, now a Postdoctoral Researcher in transformative quantum technologies (TQT), University of Waterloo, Waterloo, ON, Canada.

OTHMAN, A., “Control of Light-Matter Interactions in Classical and Quantum Optics”, (D. Yevick), January 2018, now an Assistant Professor, Physics Department, Taibah University, Medina, Saudi Arabia.

PANSRI, S., “Spherically Confined Polymers: Monte Carlo Simulations with Expanded Ensemble Density-of-States Method”, (J. Chen), February 2018, now a Lecturer and Researcher at Ubon Ratchathani University, Thailand.

POMARANSKI, D., “Precision Low Temperature Calorimetry and Susceptibility of Magnetic Pyrochlores”, (J. Kycia), September 2018, now searching for employment.

PONTE, P., “Periodically-driven quantum many-body systems, many-body localization and machine learning”, (R. Melko), March 2018, now an Associate Data Scientist, Trading Products at Bank of Montreal, Toronto, Ontario, Canada.

SARENAC, D., “Structured Beams as Quantum Probes”, (D. Cory), June 2018, now a Technical Lead, Quantum Early Adopters, Transformative Quantum Technologies, Institute for Quantum Computing, University of Waterloo, Waterloo, ON, Canada.

SINAMULI MUSEMA, C., “On the robustness of Holographic Dualities: AdS Black Holes and Quotient Spaces”, (R. Mann), August 2018, now a Research Assistant in Quantum field and String theory, Perimeter Institute for Theoretical Physics, Waterloo, ON, Canada.

TORLAI, G., “Augmenting Quantum Mechanics with Artificial Intelligence”, (R. Melko), December 2018, now a Research Fellow at the Flatiron Institute (Simons Foundation), New York, NY, United States.

VANTYGHM, A., “An ALMA View of Molecular Gas in Brightest Cluster Galaxies”, (B. McNamara), September 2018, now pursuing a Postdoctoral Fellowship at the University of Manitoba, Winnipeg, MB, Canada.

UNIVERSITY OF WESTERN ONTARIO

ARNASON, R., “Improved techniques for atmospheric ozone retrievals from lidar measurements using the Optimal Estimation Method and Machine Learning”, (P. Barmby), December 2018, now a Senior Scientist at Interface Fluidics in Edmonton, AB, Canada.

AUDDY, S., “From large-scale molecular clouds to filaments and cores: Unveiling the role of the magnetic fields in star formation”, (S. Basu), July 2018, now pursuing a Postdoctoral at Academia Sinica Institute for Astronomy and Astrophysics (ASIAA) in Taipei, Taiwan.

BROCKLEBANK, M., “High Resolution Ion Beam Investigations of the Mechanism of Titanium Anodization”, (L. Goncharova), October 2018, now pursuing a Postdoctoral in the School of Physics at the University of Melbourne in Victoria, Australia.

BRUZZONE, S., “Mapping debris disk at extreme contrast: Near-IR Differential Polarimetric Imaging with the Gemini Planet Imager”, (S. Metchev), September 2019, now pursuing a Postdoctoral at NASA Goddard in Greenbelt, Maryland, USA.

CADOGAN, C., “Properties of Silicon quantum dots”, (L. Goncharova & P.J. Simpson), December 2018, now an Optical Test Engineer at ScienceTech Inc. in London, ON, Canada.

DICARLO, A., “Investigation of flow disturbances and multi-directional wall shear stress in the stenosed carotid artery bifurcation using particle image velocimetry”, (T. Poepping), December 2018, now pursuing a Medical Physics Postdoctoral at the University of Chicago, USA.

FARHANI, G., “Investigations of the X-ray Binary Population in 3 Local Group Galaxies”, (R.J. Sica), November 2018, now employed at The Globe and Mail doing machine learning and data science in Toronto, ON, Canada.

GUAN, J., “Effects of High Pressure on Photochemical Reactivity of Organic Molecular Materials Probed by Vibrational spectroscopy”, (Y. Song), July 2018, now pursuing a Postdoctoral at the Institute of Physics at the University of Freiburg, Germany.

HOPKINS, C., “Vibrating-wire Rheometry”, (J. de Bruyn), August 2018, now pursuing a

Postdoctoral at the Okinawa Institute of Science and Technology (OIST) in Okinawa, Japan.

JALALI, A., “Validating and highlighting the advantages of the Optimal Estimation Method for Rayleigh lidar middle atmospheric temperature retrievals”, (R.J. Sica), December 2018, now pursuing a postdoctoral at the University of Toronto, ON, Canada.

LIU, Y., “Three Experiments on Complex Fluids”, (J. de Bruyn), December 2017, now pursuing a Postdoctoral at the Institute of Mechanics in Beijing, China.

MARTINEZ, A., “High Resolution Spectroscopy of the Hyades Giants”, (D.F. Gray), April 2018, now searching for employment.

PARK, J., “Copper-nanoparticle decorated graphene thin films: Applications in metal-assisted etching and synthesis of next-generation graphene-based nanomaterials”, (G. Fanchini), October 2018, now pursuing a Postdoctoral in the Engineering Department at the University of Windsor, ON, Canada.

SUBASINGHE, DA3:E14., “Physical properties of faint meteors through high-resolution observations”, (M. Campbell-Brown), December 2017, now interviewing and searching for employment in Industry in Southwestern Ontario, Canada.

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AL RASHID, M., “Design Principles for Lab-in-a-Photonic-Crystal Biosensors”, (S. John), November 2018, now a Data Scientist, BitSight Technologies, Boston, MA, U.S.A.

BYRNE, B., “Monitoring the Carbon Cycle: Evaluation of Terrestrial Biosphere Models and Anthropogenic Greenhouse Gas Emissions with Atmospheric Observations”, (K. Strong), November 2018, now pursuing a Postdoctoral fellowship at NASA Jet Propulsion Laboratory, Pasadena, California, U.S.A.

FONG, H., “From Simulations to Signals: Analyzing Gravitational Waves from Compact Binary Coalescences”, (H. Pfeiffer), November 2018, now pursuing a Postdoctoral fellowship at The University of Tokyo, Tokyo, Japan.

GOERKE, R., “A New Formalism for Soft Collinear Effective Theory with Applications”, (M.E. Luke), June 2018, now a Data Scientist at ICBC (Insurance Corporation of British Columbia), Vancouver, BC, Canada.

GOLARAEI, A., “Polarimetric Second-Harmonic Generation Microscopy for Histopathology”, (V. Barzda), November 2018, now pursuing a Postdoctoral fellowship at University Health Network, Toronto, ON, Canada.

GRANSTROM-ARNDT, C., “Probing Topological Insulators and Itinerant Magnets at the Nano- and Atomic-scale with Andreev Reflection Spectroscopy”, (J.Y.T. Wei), November 2018, now searching for employment.

HU, Y., “X-ray Spectroscopy and Scattering Studies on Thermoelectric Skutterudites”, (Y.J. Kim), November 2018, now a Senior Consultant, YE, Toronto, ON, Canada.

LEWIS, A., “Orbital Resonances and GPU Acceleration of Binary Black Hole Inspiral Simulations”, (H.P. Pfeiffer), June 2018, now pursuing a Postdoctoral fellowship at Perimeter Institute, Waterloo, ON, Canada.

LI, Y., “Insane in the Membrane: The Functional Assembly of a G Protein Coupled Receptor at the Single-Molecule Level”, (C.C. Gradinaru), March 2018, now a course Instructor at University of Toronto Mississauga, Mississauga, ON, Canada.

PIMENTA SILVEIRA, H., “Simulating One-Dimensional Physics with Stationary Dark Polaritons”, (D.F.V. James), November 2018, now a Data Scientist at Scotia Bank, Toronto, ON, Canada.

PRANAI, V., “Room-Temperature Bose-Einstein Condensation of Exciton-Polaritons in Photonic Crystal Architectures”, (S. John), November 2018, now a Teacher, Toronto, ON, Canada.

SADEQ, Z.N., “The Electronic and Optical Properties of Graphene Flakes and Similar System”, (J. Sipe), November 2018, now an Associate at McKinsey & Company, Toronto, ON, Canada.

SALAZAR GONZALEZ, J. C., “Effective Models for Optical Properties: A Study on 1D, 2D and 3D Materials”, (J.E. Sipe), March 2018, now pursuing a Postdoctoral fellowship at University of Warwick, U.K.

STANEVICH, I., “Variational Data Assimilation of Satellite Remote Sensing Observations for Improving CH4 Simulation in Chemical Transport Models”, (K. Strong), June 2018, now a Data Scientist at Layer 6 AI, Toronto, ON, Canada.

TIBBO, M., “A True-Triaxial Laboratory Seismic Velocity Experiment under in Situ Stress Conditions: A Comparison with in Situ 3D Stress and Velocity”, (R.P. Young), November 2018, now searching for employment.

ZHANG, H., “Novel Phases in Hetero-Epitaxial and Super-Oxygenated Thin Films of Complex Oxides”, (J.Y.T. Wei), June 2018, now an Associate Director, Counterparty Credit Risk at Royal Bank Canada, Toronto, ON, Canada.