

# PHD PHYSICS DEGREES AWARDED IN CANADIAN UNIVERSITIES\*

## DOCTORATS EN PHYSIQUE DÉCERNÉS PAR LES UNIVERSITÉS CANADIENNES\*

DECEMBER 2015 TO DECEMBER 2016 / DÉCEMBRE 2015 À DÉCEMBRE 2016

### BROCK UNIVERSITY

- KOROBANIK, J., "The Effects of Magnetic Dilution and Applied Pressure on Several Frustrated Spinels", (F. Razavi), June 2016, now searching for employment in Ottawa, ON, Canada.
- OSPADOV, E., "Theory and Application of a Pure-sampling Quantum Monte Carlo Algorithm", (S. Rothstein), June 2016, now a Postdoctoral Fellow at the University of Western Ontario, London, ON, Canada.
- TAHERI, M., "The Structural, Magnetic and Thermal Studies of  $Ce_{1-x}Eu_xCrO_3$  Nano-Powders", (F. Razavi), June 2016, now searching for employment in Calgary, AB, Canada.
- PSHENITSIN, D., "Conservation laws of magneto-hydrodynamics and their symmetry transformation properties", (S. Anco, T. Wolf and A. Odesski), October 2016.
- VAN OOSTEN, B., "A Multi-Scale Molecular Dynamic Approach to the Study of the Outer Membrane of the Bacteria *Pseudomonas Aeruginosa* PA<sup>01</sup> and the Biocide Chlorhexidine", (T. Harroun), October 2016, now a Postdoctoral Fellow at Brock University, St. Catharines, ON, Canada.

### CARLETON UNIVERSITY

- BEAUCHESNE, H., "Possible Avenues in Super-symmetry and Naturalness", (T. Gregoire), October 2016.
- LACEY, J., "Cross Section Measurements of the Higgs Boson in the Diphoton Decay Channel Using Proton-Proton Collision Data Recorded by the ATLAS Detector at Centre-of-Mass Energies of 7 TeV and 8 TeV", (A. Bellerive), February 2016.
- MIKSYS, N., "Advancements in Monte Carlo Dose Calculations for Prostate and Breast Permanent Implant Brachytherapy", (R. Thomson), October 2016.
- PILKINGTON, T., "Dark Matter and Collider Phenomenology of Large Electroweak Scalar Multiplets", (H. Logan), October 2016.
- POURMOGHADDAS, A., "Quantitative Imaging With a Pinhole Cardiac SPECT CZT Camera", (G. Wells), May 2016.

\*This list includes all information submitted to the CAP office by 2017 January 21.

\*La liste comprend l'information reçue au bureau de l'ACP jusqu'au 21 janvier 2017.

### CONCORDIA UNIVERSITY

- BAHRAMI, S., "The Higgs triplet model: mixing in the neutral sector, vector-like fermions, and dark matter", (M. Frank), October 2016, now a Postdoctoral Fellow at McGill University, Montreal, QC, Canada.
- SHARMA, B., "Development of semiempirical models for metalloproteins", (G. Lamoureaux), October 2016, now a Postdoctoral Fellow at Concordia University, Montreal, QC, Canada.

### DALHOUSIE UNIVERSITY

- COOPER, M., "Interpreting satellite remote sensing observations using a chemical transport model: implications for processes affecting tropospheric NO<sub>x</sub> and ozone", (R. Martin), May 2017, now pursuing a Postdoctoral Fellowship at Dalhousie University, Halifax, NS, Canada.
- KARAHKA, M., "Physics in high electric fields", (J. Kreuzer), May 2017, now a Teaching Assistant at Dalhousie University, Halifax, NS, Canada.

### MCGILL UNIVERSITY

- ARCHAMBAULT, S., "Search for very-high-energy gamma-ray emission from primordial black holes with veritas", (D. Hanna), October 2016, now pursuing a Postdoctoral Fellowship at Chiba University, Chiba, Japan.
- BEAUDOIN, F., "Understanding and suppressing dephasing noise in semiconductor qubits", (W. Coish), October 2016, now pursuing a Postdoctoral Fellowship at Dartmouth College, Hanover, NH, USA.
- BEAUPEUX, M., "Physical aspects of morphogenesis: coupled oscillators and tissue kinematics in vertebrate embryos", (P. Francois), October 2016, now an associate at Morgan Stanley, Montreal, QC, Canada.
- CHEAIB, R., "A search for the decay of a B meson into a kaon and a tau lepton pair at the BaBar experiment", (S. Robertson), May 2016, now pursuing a Post Doctoral Fellowship at the University of Mississippi, Oxford, MS, USA.
- FARRELL, A., "Using external fields to control topological insulators and topological superconductors", (T. Pereg-Barnea), October 2016, now a data scientist at Capital One, Richmond, Virginia, USA.
- GRIFFIN, S., "VERY TRenDy: the VERITAS transient detector", (M. Dobbs), February 2016, now pursuing a Postdoctoral Fellowship at McGill University, Montreal, QC, Canada.
- HAAG, A., "Potential-driven surface stress of a cantilever-based sensor", (P. Grutter), October 2016, now travelling around the world.

KLOTZ, A., "DNA polymer physics in complex nanofluidic environments", (W. Reisner), February 2016, now a Postdoctoral Research Associate at the Massachusetts Institute of Technology (MIT), Cambridge, MA, USA.

LEE, S., "System radiobiology modelling of radiation induced lung disease", (I. El Naqa and J. Seuntjens), October 2016, now pursuing a Post Doctoral Fellowship at the Memorial Sloan Kettering Cancer Center, New York, New York, USA.

LEMONDE, M., "Reaching the single-photon strong coupling regime in optomechanical cavities", (A. Clerk), May 2016, now pursuing a Postdoctoral Fellowship at TU Wien, Vienna, Austria.

PAPACONSTADOPOULOS, P., "On the detector response and the reconstruction of the source intensity distribution in small photon fields", (J. Seuntjens), May 2016, now a Medical Physics Resident at the Jewish General Hospital, Montreal, QC, Canada.

PAQUET, J., "Characterizing the non-equilibrium quark-gluon plasma with photons and hadrons", (C. Gale), February 2016, now pursuing a Post Doctoral Fellowship at Stony Brook University, Stony Brook, New York, USA.

RYU, S., "Integrated description of heavy ion collisions at RHIC and the LHC", (S. Jeon), October 2016, now pursuing a Postdoctoral Fellowship at the Frankfurt Institute for Advanced Studies (FIAS), Frankfurt, Germany.

SCHNEIDER, A., "Nonlinear information processing in early vestibular pathways", October 2016, now searching for employment.

SCHUMACHER, Z., "Time-domain Kelvin probe force microscopy for local ultra-fast decay time measurements", (P. Grutter), October 2016, now travelling around the world.

STOEBE, M., "Measurement of the inclusive isolated prompt photon cross-section in proton-proton collisions at  $\sqrt{s}=8$  TeV with the ATLAS detector", (B. Vachon), May 2016, now an R&D Manager and Executive Assistant at Pyramid Computer GmbH, Freiburg, Germany.

VUJANOVIC, G., "Exploring the dynamics of strongly interacting media with dilepton tomography", (C. Gale), February 2016, now pursuing a Postdoctoral Fellowship at the Ohio State University, Columbus, Ohio, USA.

### McMASTER UNIVERSITY

DEGHAN-KOOSHKGHAZI, A., "Theoretical Study of Inhomogeneous Polymeric Systems", (A. Shi), September 2016, now a Data Scientist at Indellient Inc., Oakville, ON, Canada.

DIENER, R., "Standard Model Naturalness from Dark Vortices & Codimension-2 Braneworlds", (C. Burgess), March 2016, now a Defence Scientist at Defence Research and Development Canada, Ottawa, ON, Canada.

HASAN, F., "Numerical Study of the Dynamical Casimir Effect & its Classical Analogue in a Double Cavity", (D. O'Dell), April 2016, now a Machine Learning Engineer at GradeSlam, Montreal, QC, Canada.

HUANG, W., "Theoretical Studies of Unconventional Superconductivity in  $SR_2RuO_4$ ", (C. Kallin), August 2016, now a Post Doc at the Institute of Advanced Studies at Tsinghua University, Beijing, China.

KLASSEN, M., "Simulating Radiative Feedback and the Formation of Massive Stars", (R. Pudritz), January 2016, now a Chief Data Scientist & Co-Founder at Paladin:Paradigm Knowledge Solutions, Calgary, AB, Canada.

MILADINOVIC, N., "The Abraham-Minkowski Controversy & the He-McKellar-Wilkens Phase", (D. O'Dell), December 2016, now a Sessional Lecturer at McMaster University, Hamilton, ON, Canada.

## MEMORIAL UNIVERSITY

ALODHAYB, A.N., "Development of Calix[4]arene-Functionalized Microcantilever Array Sensing System for the Rapid, Sensitive and Simultaneous Detection of Metal Ions in Fresh Water", (L. Beaulieu), June 2016, now a Per-Course Instructor at AlJouf University, Saudi Arabia.

KHATAMI, M.H., "Membrane-Active Protein Interactions with Phospholipid Bilayers", (V. Booth and I. Saika-Voivod), October 2016, now searching for employment.

ZHANG, D., "Opto-Microfluidic Devices with Femto-second Laser Microfabrication", (Q. Chen), October 2016, now an Application Scientist with Sciencetech Inc., London, ON, Canada.

## POLYTECHNIQUE MONTRÉAL

BAVANDSAVADKOUHI, R., "Synthesis and Chemical and Morphological Characterization of Ruthenium-Based Nanoparticles", (E. Sacher/A. Yelon), December 2016, now searching for employment in Canada.

BOSTANI, A., "Design and Implementation of Apodized and Unapodized Frequency Converters in Bulk Aperiodically Poled Nonlinear Material", (R. Kashyap), June 2016, now a Reliability Engineer at Ciera Compagny, Québec, QC, Canada.

DE MONTIGNY, E., "Instrumentation optique pour l'identification per-opératoire des tissus durant les chirurgies de la thyroïde", (C. Boudoux), August 2016, now a Software Engineer at Alazar Technologies, Pointe-Claire, QC, Canada.

ÉTHIER-MAJCHER, G., "Contrôle optique de qubits liés à des centres isoélectroniques d'azote dans le  $GaAs$ ", (S. Francoeur), August 2016, now a Postdoctoral Fellow at the Cambridge University, Cambridge, UK.

GHALI, H., "Optical Microcavities for Real-Time Detection of Bacteria", (Y.-A. Peter/P. Bianucci), June 2016, now a Postdoctoral Fellow at the Concordia University, Montreal, QC, Canada.

LACHAÎNE, R., "Ingénierie de nanoparticules plasmoniques robustes pour la génération de bulles par laser en vue d'applications biomédicales", (M. Meunier), Novembre 2016, now an Optical system designer and laser processing at Dental Wings, Montréal, QC, Canada.

MADORE, W.-J., "Imagerie optique pour le diagnostic du cancer de l'ovaire", (C. Boudoux/N. Godbout), December 2016, now a Postdoctoral Fellow at the CHUM Centre for Research, Montreal, QC, Canada.

MAHJOUR, M., "Développement d'une méthode de Monte Carlo dépendante du temps et application au réacteur de type CANDU-6", (J. Koclas), Décembre 2016, now a Lecturer at the Polytechnique Montréal, Montreal, QC, Canada.

MEHDI ZADEH, F., "Étude thermo-hydraulique de l'écoulement du modérateur dans le réacteur CANDU-6", (A. Teyssedou and S. Étienne), June 2016, now a Postdoctoral Fellow at the Institut supérieure de l'Aéronautique et de l'espace, Toulouse, France.

POIRIÉ, T., "Caractérisations tribomécaniques in situ de couches minces hybrides pour l'optique ophtalmique", (J.-E. Klemberg-Sapieha and L. Martinu), Décembre 2016, now searching for employment in Canada.

ST-JEAN, P., "Dynamics of Excitonic Complexes Bound to Isoelectronic Centers: Toward the Realization of Optically Addressable Qubits", (S. Francoeur), September 2016, now a Postdoctoral Fellow at the Centre National de la Recherche Scientifique, CNRS, Paris, France.

VANIER, F., "Nonlinear Optics in Chalcogenide and Tellurite Microspheres for the Generation of Mid-Infrared Frequencies", (Y.-A. Peter), December 2015, Now a Research Officer at the National Research Council Canada, Boucherville QC, Canada.

## QUEEN'S UNIVERSITY

BECERRA, R., "Optical properties of chiral thin films and microparticles", (K. Robbie), November 2016, now an Optical Coating Specialist at L-3 WESCAM, Don Mills, ON, Canada.

BROWN, J., "Using phase-space localized basis functions to obtain vibrational energies of molecules", (T. Carrington), November 2016, now a Postdoctoral Fellow at Temple University in Philadelphia, USA.

DAVID-URAZ, A., "Investigating the potential magnetic origin of wind variability in OB stars", (G. Wade/D. Hanes), November 2016, now a Postdoctoral Fellow at Florida Institute of Technology, Melbourne, Florida, USA.

SHOKRALLA, S., "Comprehensive characterization of measurement data gathered by the pressure tube to calandria tube gap probe", (T. Krause/J. Morelli), November 2016, now Sr. Advisor - Model Development at Ontario Power Generation, ON, Canada.

SHULTZ, M., "Rotational evolution and magnetospheric emission of the magnetic early B-type stars", (G. Wade/D. Hanes), November 2016, now a Postdoctoral Fellow at Uppsala University, Uppsala, Sweden.

## RYERSON UNIVERSITY

GONG, P., "Novel ultrasound transmission and reconstruction techniques for synthetic transmit aperture imaging", (Y. Xu and M. Kolios), June 2016, now pursuing a Postdoctoral Fellowship at the Mayo Clinic, Rochester, MN, USA.

MARAGHECHI, B., "Feasibility of non-invasive thermometry in hyperthermia regime using harmonics generated by nonlinear ultrasound wave propagation", (J. Tavakkoli, M. Kolios), October 2016, now pursuing a Postdoctoral Fellowship at the Grand River Hospital, Kitchener, ON, Canada.

RAZANI, M., "Development of optical coherence tomography technique for clinical diagnostics and monitoring", (M. Kolios), October 2016, now pursuing a Postdoctoral Fellowship at the Ryerson University, Toronto, ON, Canada.

SHELKANNOVA, I., "Development of the numerical aperture gated, spatially resolved, diffuse reflectance imaging architecture for subsurface imaging of microvasculature", (A. Douplik), June 2016, now currently unemployed.

## SIMON FRASER UNIVERSITY

EJTEMAEE, S., "Dynamics of trapped Ions near the linear-zigzag structural phase transition", (P. Haljan), January 2016, now pursuing an industrial Postdoctoral Fellowship at Dwave systems, Burnaby, BC, Canada.

EMADI, M., "Radiative and pionic decays of heavy-light Mesons using HISQ quarks", (H. Trotter), January 2016, now currently employed at Semios Bio Technologies, Vancouver, BC, Canada.

MONTOYA, E., "Spin pumping and spin transport in magnetic heterostructures", (B. Heinrich), May 2016, now a Postdoctoral Fellow at the University of California - Irvine, Irvine, CA, USA.

## TRENT UNIVERSITY

MOHANAN, A., "Mitigating Cold Flow Problems of Biodiesel: Strategies with Additives", S. Narine, January 2016.

## UNIVERSITÉ DE SHERBROOKE

FORGUES, J.-C., « Étude du bruit de grenaille dans un conducteur simple: observation d'enchevêtrement, de compression d'états à deux modes et du quatrième cumulant des fluctuations statistiques dans le courant émis par une jonction tunnel », (B. Reulet), Janvier 2016, maintenant chargé de cours à l'Université de Sherbrooke, Sherbrooke, QC, Canada.

GRISSONNANCHE, G., « Une fable de phases en interaction dans les cuprates supraconducteurs contée par le transport thermique », (L. Taillefer), Mars 2016, maintenant chargé de cours et travailleur autonome à Clermont-Ferrand, France.

REYMBAUT, A., « Universalité du crossover de Mott à demi-remplissage et effets de la répulsion coulombienne aux premiers voisins sur la dynamique supraconductrice des isolants de Mott dopés aux trous », (A.-M. Tremblay), Janvier 2016, maintenant un Professionnel de recherche à l'Université de Sherbrooke, Sherbrooke, QC, Canada.

ROBERGE, B., Étude optique et magnétique des composés  $RVO_3$ ", (S. Jandl), Janvier 2016, maintenant un Stagiaire postdoctoral à l'Université de Sherbrooke, Sherbrooke, QC, Canada.

ROY-GUAY, D., Magnétométrie vectorielle à base de centre colorés dans le diamant, M. Pioro-Ladrière (D. Morris), Octobre 2016, maintenant un Stagiaire postdoctoral à l'Université de Sherbrooke, Sherbrooke, QC, Canada.

## UNIVERSITY OF ALBERTA

- BAHRAMIAN, A., "Behavior of Low-Mass X-Ray Binaries and their Formation in Globular Clusters", (C. Heinke), November 2016.
- BAKER, M., "Hyperfine Splitting in Non-Relativistic Bound States", (A. Penin), November 2016.
- BUTT, A., "Search for Microscopic Black Holes in Multi-Jet Final-States Using Multiple Single-Jet Triggers with ATLAS Detector with 8 TeV Proton-Proton Collisions at the Large Hadron Collider", (D. Gingrich), November 2016.
- CHANDLER, C., "Realistic Models for Polarons", (F. Marsiglio), November 2016.
- ELSHAMOUTY, K., "Characteristics of Neutron Stars from X-Rays Observations", (C. Heinke), November 2016.
- HEALEY, M., "Computational Study of a-Synuclein Structure and Druggability", (J. Tuszynski), November 2016.
- IBRAHIM, A., "Separating Simultaneous Seismic Sources using Robust Inversion of Radon and Migration Operators", (M. Sacchi), June 2016.
- JEON, J., "Novel Transport Properties in Spatially Confined La<sub>0.3</sub>Pr<sub>0.4</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> Thin Films", (K. Chow, R. Marchand), November 2016.
- OMIYINKA, T., "Search for a Superfluid Phase of Parahydrogen: Exploring the Effect of Confinement", (M. Boninsegni), November 2016.
- PAVLOVSKII, K., "Mass Transfer from Giant Donors", (N. Ivanova), June 2016.
- POURESLAMI ARDAKANI, E., "Regional Geophysical Study of the Athabasca Region, Northeastern Alberta: Implications for Geothermal Development", (D. Schmitt), November 2016.
- ROSAS BONILLA, J., "Three-Dimensional Thermal Structure of Subduction Zones", (C. Currie), November 2016.
- SIBLEY, L., "The SNO+ Liquid Scintillator Response to Low-Energy Electrons and its Effect on the Experiment's Sensitivity to a Future Neutrinoless Double Beta Decay Signal", (A. Hallin), November 2016.
- VAEZI, Y., "Applications of Seismic Interferometry in Cross-Sectional Monitoring", (M. van der Baan), November 2016.

## UNIVERSITY OF BRITISH COLUMBIA

- ADOLPHS, C., "Extensions beyond standard models", (M. Berciu), September 2016.
- BITTER, M., "Quantum coherent control of laser-kicked molecular rotors", (V. Milner), November 2016.
- CAPSONI, M., "On-surface self-assembly and characterization of a macromolecular charge transfer complex by scanning tunneling microscopy and spectroscopy", (S. Burke), September 2016.
- CHEN, H., "Validation and optimization of myelin water imaging in a preclinical model of spinal cord injury", (Kozłowski, Piotr), May 2016.
- FOELL, C., "Luminescent properties of Pb-based (PbX) colloidal quantum dots (CQDs) in vacuum, on silicon and integrated with a silicon-on-insulator (SOI) photonic integrated circuit (PIC)", (J. Young), November 2016.

- FONSECA, E., "Mass and Geometric Measurements of Binary Radio Pulsars", (I. Stairs), November 2016.
- GOLDSBURY, R., "White dwarf populations in globular clusters", (H. Richer), May 2016.
- GUNTON, W., "Photoassociation and Feshbach resonance studies in ultra-cold Gases of <sup>6</sup>Li and Rb atoms", (K. Madison), May 2016.
- GUTIERREZ, A., "Cold antihydrogen experiments and radial compression of antiproton clouds in the ALPHA apparatus at CERN", (W. Hardy), February 2016.
- KOLB, P., "The TRIUMF nine-cell SRF cavity for ARIEL", (R. Kiefl and N. Merminga), May 2016.
- KOROBENKO, A., "Control of molecular rotation with an optical centrifuge", (V. Milner), September 2016.
- MCKENZIE, R., "Fluctuations and phase transitions in quantum Ising systems", (P. Stamp), September 2016.
- NARIMANI, A., "Cosmological tests of gravity", (D. Scott), September 2016.
- RABIDEAU, C., "Holographic entanglement entropy: structure and applications from noncommutative field theories to energy conditions", (J. Karczmarek), September 2016.
- SABELLA Garnier, P., "Geometry from quantum mechanics: entanglement, energy conditions and the emergence of space", (J. Karczmarek), September 2016.
- SMYTH, D., "Numerical Holographic Condensed Matter", (M. Rozali), May 2016.
- STORTZ, G., "Development of a Small Animal MR Compatible PET Insert", (V. Sossi), May 2016.
- URIBE, C., "SPECT/CT quantification of Lu-177 for dosimetry in radionuclide therapy treatments of neuroendocrine tumors", (A. Celler), May 2016.

## UNIVERSITY OF CALGARY

- ABDALLAH, M.H., "Time Dependence of the RXTE X-ray Spectrum of Hercules X-1", (D. Leahy), November 2016.
- DHAND, I., "Multi-Photon Multi-Channel Interferometry for Quantum Information Processing", (B. Sanders), June 2016.
- KHAZALI, M., "Applications of Atomic Ensembles for Quantum Information Processing and Fundamental Tests and Quantum Physics", (C. Simon), November 2016, now a Research Assistant at the, University of Calgary, Calgary, AB, Canada.
- MARTIN, E., "Modeling complex systems as dynamical networks", (J. Davidson), June 2016, now a business owner.
- McGEACHY, P., "Optimization in Radiation Therapy: Applications to Brachytherapy and Intensity Modulated Radiation Therapy", (R. Khan), June 2016, now following a Medical Residency in Winnipeg.
- MIVEHVAR, F., "Cavity-Induced Synthetic Gauge Potentials", (N.M. Ahmadi), June 2016.
- NARASIMHACHAR, V., "Quantum Resource Theories for Thermodynamics, Reference

Frames, and Uncertainty", (G. Gour), November 2016.

- PULWICKI, J., "Dynamics of Plant Growth: A theory based on Riemannian Geometry", (D. Hobill), June 2016, now a Postdoctoral Fellow in France.
- RAGHOONUNDUN, A., "Exact Solutions for Compact Objects in General Relativity", (D. Hobill), June 2016.
- SINCLAIR, N., "Optical quantum memory and signal processing using a rare-earth-ion-doped", (W. Tittel), June 2016, now a Postdoctoral Fellow at the University of Calgary, Calgary, AB, Canada.
- ZAHEDINEJAD, E., "Machine Learning for Designing Fast Quantum Gates", (B. Sanders), June 2016.

## UNIVERSITY OF GUELPH

- EMAMI, S., "Biophysical Studies of Human Aquaporin 1 Structural Insights by Solid-State NMR and Mechanism of Inhibition by Mercury", (V. Ladizhansky and L. Brown), January 2016, now in search of employment.
- GRZETIC, D., "Connecting structure evolution and chain diffusion in dense polymeric systems using dynamical self-consistent field theory", (R. Wickham), June 2016, now a Postdoctoral Fellow at the University of California, Santa Barbara, CA, USA.
- SCHMIDT, M., "NMR Studies of Liquid Disordered and Liquid Ordered Phases Coexistence in Model Membranes", (J.H. Davis), June 2016, now a Postdoctoral Fellow at the Simon Fraser University, Burnaby, BC, Canada.
- WARD, M., "Solid-state NMR investigations of transmembrane proteins - new approaches for signal enhancement and in situ studies of anabaena sensory rhodopsin", (V. Ladizhansky), June 2016, now a Postdoctoral Fellow at the Utrecht University, Utrecht, Netherlands.

## UNIVERSITY OF MANITOBA

- CHOWDHURY, U., "A cooler penning trap to cool highly charged radioactive ions and mass measurement of <sup>24</sup>Al", (G. Gwinner), October 2016, now pursuing a Postdoctoral Fellowship at SNOLAB in Sudbury, ON, Canada.
- COBUS, L., "Anderson localization and anomalous transport of ultrasound in disordered media", (J.H. Page), May 2016, now pursuing a Postdoctoral Fellowship at the Institut Langevin, ESPCI ParisTech in Paris, France.
- COLLISTER, R., "Towards atomic parity violation at the francium trapping facility", (G. Gwinner), February 2016, now pursuing a Postdoctoral Fellowship at CERN, Geneva, Switzerland.
- DESAUTELS, R., "Mediating the exchange coupling and anisotropy in nanoscale magnets via interfacial interactions", (J. van Lierop), February 2016, now pursuing a Postdoctoral Fellowship at Oak Ridge National Laboratory, Oakridge, TN, USA.
- FU, L., "Spintronic sensor based microwave imaging", (C-M. Hu), October 2016.
- MCCOWAN, P., "In vivo patient dose verification of volumetric modulated arc therapy including stereotactic body radiation treatment applications using portal dose images", (B. McCurdy), May

2016, now a Radiotherapy Physics Resident at CancerCare Manitoba, Winnipeg, MB, Canada.

SUN, H., "An investigation into the use of scattered photons to improve 2D position emission tomography (PET) functional imaging quality". (S. Pistorius), February 2016, now the CEO of Soph Medical Solutions in China.

WEST, J., "The connection between supernova remnants and the galactic magnetic field", (S. Safi-Harb), October 2016, now pursuing a Postdoctoral Fellowship at Dunlap Institute for Astronomy & Astrophysics, Toronto, ON, Canada.

## UNIVERSITY OF NEW BRUNSWICK

WATSON, C., "GPS Total Electron Content Techniques for observing the structures and dynamics of the high-latitude Ionosphere", (T. Jayachandran), December 2015, now pursuing a Postdoctoral Fellowship at the National Center for Atmospheric Research (NCAR), Boulder, CO, USA.

## UNIVERSITY OF OTTAWA

ALHARBI, A., "High-order Harmonic Spectroscopy of Cyclic Organic Molecules", (R. Bhardwaj-Vedula), October 2016, Faculty member at King Abdulaziz City Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia.

ALSHEHRI, A., "Micro-and Nanostructuring of Polymers by Femtosecond Laser Pulses", (R. Bhardwaj-Vedula), December 2016, Faculty member at King Khalid University, Abha, Saudi Arabia.

LU, Y., "Study of the Kerr Phase-Interrogator and its Applications", (X. Bao), December 2015, now an Assistant Professor at the National Defense University, China.

NEJADSATTARI, F., "Theoretical & Experimental Studies of Electronic, Magnetic and Hyperfine Interacton Properties of Novel Compounds", (Z. Stadnik), April 2016, now a Research Associate in the Department of Physics, University of Ottawa, Ottawa, ON, Canada.

NKANTA, J.E., "Modelling & Characterization of Laterally-Coupled Distributed Feedback Laser and Semiconductor Optical Amplifier", (T. Hall), June 2016.

PAYEUR, A., "Oscillations and Gain Control in Sensory Systems", (A. Longtin), March 2016, now a Postdoctoral fellow at the University of Ottawa Brain and Mind Research Institute, Ottawa, ON, Canada.

RAJAI, P., "Measurement of Refractive Index & Thickness of Multi layer Systems Using Fourier Domain Optical Coherence Tomography", (R. Munger), October 2016.

VAMPA, G., "Role of Electron-Hole Recollisions in High Harmonic Generation from Bulk Crystals", (P. Corkum), October 2016, now a Postdoctoral fellow at the Stanford University, Stanford, CA, USA.

## UNIVERSITY OF SASKATCHEWAN

ELASH, B., "The Aerosol Limb Imager", (A. Bourassa), October 2016, now an Analyst at

MacDonald, Dettwiler and Associates, Richmond, BC, Canada.

FRIAS, W., "Plasma Instabilities in Hall Thrusters", (A. Smolyakov), January 2016.

ISERHIENRHIEN, B., "On the origin of Close-Range E Region Echos Observed by Super-DARN Hf Radars in the Mid- and High Latitudes", (JP. St-Maurice), April 2016, now Self Employed at BIRO Overseas Study and Support Services Inc. Saskatoon, SK, Canada.

JOHNSON, Neil, "Characterization of Epitaxial Silicene", (A. Moewes), May 2016, now searching for a Postdoctoral fellowship position.

LITT, S., "Ion Thermal and Nonlinear Effects in Hall Plasmas", (A. Smolyakov), January 2016, now a Sessional Lecturer at the University of Saskatchewan, Saskatoon, SK, Canada.

WANG, Z., "Hidden World: Higgs, Dark Matter & Conformal Symmetry", (T. Steele), July 2016, now a Postdoctoral fellow at CP3, Perimeter Institute, Waterloo, ON, Canada.

YONG, X., "Theoretical study on the phase transition and chemical reaction of selected materials at high pressure", (J. Tse), December 2016, Research fellow, Institute of high performing computing, Agency for Science technology and research, Singapore.

ZHAO, Jianbao, "Study of Mg<sub>2</sub>Si-based Thermoelectric Materials", (J. Tse), April 2016, now a Science Associate at Canadian Light Source, Saskatoon, SK, Canada.

## UNIVERSITY OF TORONTO

ANDRES, H., "Northern High Latitude Climate Variability of the Last Millenium", (W.R. Peltier), March 2016, now a Postdoctoral fellow at the Memorial University, St. John's, NL, Canada.

COOK, A., "Double Pervoskites with Strong Spin-Orbit Coupling", (A. Paramakanti), November 2016, now a Postdoctoral fellow at the University of Zurich, Zurich, Switzerland.

DMOCHOWSKI, G., "The End of N-Scheme", (A. M. Steinberg), June 2016, now a Postdoctoral fellow at the Princess Margaret Cancer Center, Toronto, ON, Canada.

DYER, E., "Sahel and Congo Basin Precipitation: Variability and Teleconnections", (D.B.A. Jones), November 2016, now a Postdoctoral fellow at the Oxford University, Oxford, UK.

FIELD, R., "Photoinduced Spin Crossover in Single Crystal [FeII (BPY)<sub>3</sub>](PF<sub>6</sub>)<sub>2</sub>", (J.R.D. Miller), November 2016, now a Postdoctoral fellow at the University of Toronto, Toronto, ON, Canada.

HALLAJI, M., "Weak Value Amplification of a Post-Selected Single Photon", (A.M. Steinberg), June 2016, now a Manger in the Market Risk Measurement department of Scotiabank, Toronto, ON, Canada.

HARRIS, E., "Bayesian Inference Framework for the Analysis of Biological Systems Applied to RNA Activation in Human Cells", (D.R. McMillen), November 2016, now the CEO of Yazabi Predictive Inc, Toronto, Ottawa, ON, Canada.

HWANG, K., "Novel Quantum Phases in Correlated Electron Systems", (Y.B. Kim), November 2016, now a Postdoctoral fellow at the Ohio State University, Columbus, OH, USA.

KINGHORN-TAENZER, J., "Study of the Higgs boson produced in association with a weak boson and decaying to WW\* with a same sign dilepton and jets final state in  $\sqrt{s}=8\text{TeV}$  pp collisions with ATLAS detector at the LHC", (P.E. Savard), June 2016, now a Postdoctoral fellow at the Tel Aviv University, Israel.

OLSEN, K., "Temperature and Pressure Retrievals and Mitigation of the Impact of Dust for a High-Resolution Fourier Transform Spectrometer Mission to Mars", (K. Strong), June 2016, now a Researcher at the "Laboratoire de Météorologie Dynamique, Centre national de la recherche scientifique", Paris, France.

POTNIS, S., "Tunneling Dynamics of a Bose-Einstein Condensate", (A.M. Steinberg), June 2016, now a Postdoctoral fellow at the University of Toronto, Toronto, ON, Canada.

RUSSO, M., "Magnetized Astrophysical Flows", (C. Thompson), June 2016, now a Postdoctoral fellow at the University of Toronto, Toronto, ON, Canada.

SCHAFFER, R., "Quantum Spin Liquids in Kitaev and Kagome Systems", (Y.B. Kim), November 2016.

SUTTON, A., "Electronic States of Heavy Fermion Materials", (S.R. Julian), June 2016, now a Cyber Analytics Consultant at Deloitte, Toronto, ON, Canada.

TANG, Z., "Measurement-Device-Independent Quantum Cryptography", (H.K. Lo), November 2016, now a Software engineer in the Private sector, Vancouver, BC, Canada.

TIAN, Y., "Exploring Many Body Interactions with Raman Spectroscopy", (K.S. Burch), June 2016, now a Research Fellow at Nanyang Tech. University, Singapore.

VENKATARAMAN, V., "Perspectives from *ab-initio* and tight-binding: Applications to transition compounds and superlattices", (H.-Y. Kee), June 2016, now a Data Scientist at Capital One, North York, ON, Canada.

WATT-MEYER, O., "The Role of Standing and Travelling Waves in Stratosphere-Troposphere Coupling", (P.J. Kushner), November 2016, now a Postdoctoral fellow at the University of Washington, Seattle, WA, USA.

ZOU, J., "Picosecond Infrared Lasers (PIRL): Applications in Biodiagnostics and Towards Quantitative Mass Spectrometry", (R.J.D. Miller), June 2016, now a Software Verification Specialist, SCIE X, Vaughan, ON, Canada.

## UNIVERSITY OF WATERLOO

ARRAZOLA, J., "Practical Quantum Communication", (N. Lutkenhaus), June 2016, now a Postdoctoral Research Fellow at the Centre for Quantum Technologies, Singapore.

BRENNA, W., Thermodynamics and Universality in Anisotropic Higher Curvature Spacetimes", (R. Mann), October 2016, now working at SED Systems, Saskatoon, SK, Canada.

CHAI, Y., "Surface Dynamics, Glass Transition, and Crystallization of Atactic Polystyrene", (J. Forrest), October 2016, now a Postdoctoral Fellow at the University of California, Berkley, CA, USA.

FARNSWORTH, S., "Standard Model Physics and Beyond from Non-Commutative Geometry",

- (R. Myers), June 2016, now a Postdoctoral Fellow at the Max Planck Institute for Gravitational Physics, Potsdam, Germany.
- FISHER, K., "Photons & Phonons: A room-Temperature diamond quantum memory", (R. Resch), October 2016, now working in the Department of Physics at the University of Toronto, Toronto, ON, Canada.
- FOSTER, W., "Motion Management for Lung Cancer Radiotherapy: Employing the Convolution Model for Patient Specific Margin Selection", (R. Barnett and E. Osei), June 2016, now a Product Manager at Acumyn Inc, Kitchener, ON, Canada.
- FUREY, N., "RxCxHxO and space-time independent particle physics", (A. Kempf), June 2016.
- HENDERSON, R., "Nanoscale Physics of Surfactant Gene Delivery", (Z. Leonenko), June 2016, now a MD/MBA Student at University of Saskatchewan, Saskatoon, SK, Canada.
- JOCHYM-O'CONNOR, T., "Novel Methods in Quantum Error Correction", (R. Laflamme), October 2016, now working at the California Institute of Technology, Pasadena, CA, USA.
- KAISER, S., "Quantum key distribution devices: How to make them and how to break them", (T. Jennewein), October 2016, now a Postdoctoral Fellow at the Macquarie University, Sydney, Australia.
- KAMIAB, F., "Neutron Stars, the Exotica from Modifying General Relativity to Strong Magnetic Fields", (N. Afshordi), June 2016, now a Quantitative Developer at AssetMetrix GmbH, Munich, Germany.
- KHOUQEER, G., "In Vitro NMR Study of Magnetization Exchange at Low Field and Proteoglycan-Depletion at High Field in Articular Cartilage", (H. Peemoeller), October 2016, now an Assistant Professor at Al-imam Mohammad Ibn Saud University, Riyadh, Saudi Arabia.
- LAMY-POIRER, J., "Exact Results in Supersymmetric Gauge Theory", (J. Gomis /D. Gaiotto), October 2016.
- MEYER-SCOTT, E., "Heralding Photonic Qubits for Quantum Communication", (T. Jennewein), June 2016, now a Postdoctoral Fellow at the University of Paderborn, Paderborn, Germany.
- RIED, K., "Causal Models for a Quantum World", (R. Spekkens and K. Resch), October 2016, now a Postdoctoral Fellow at the University of Innsbruck, Innsbruck, Austria.
- SANDERS, Y., "Characterizing Errors in Quantum Information Processors", (R. Laflamme and F. Wilhelm-Mauch), October 2016, now a Postdoctoral Fellow at the Macquarie University, Sydney, Australia.
- SARAVANI, M., "Aspects of Nonlocality: from Particles to Black Holes", (N. Afshordi and R. Sorkin), October 2016, now a Research Associate at the University of Nottingham, School of Mathematical Sciences, Nottingham, UK.
- SILVA, J., "Exact Results in Gauge Theories", (R. Myers and P. Vieira), June 2016.
- UNIVERSITY OF WESTERN ONTARIO**
- ABEDIN, A., "Formation and past evolution of the meteoroid complex of Comet 96P/Machholz", (P.G. Brown and P. Wiegert), December 2016, now a Demonstrations Coordinator at University of Western Ontario, Ontario, London, ON, Canada.
- CYR, I., "The geometry and density of B-emission star disks from statistical analysis and numerical simulations", (C.E. Jones), December 2016.
- EZUGWU, S., "Nanoscale thermal and electronic properties of thin films of graphene and organic polyradicals", (G. Fanchini), December 2016.
- GRZENIA, B., "The circumstellar environments of B-emission stars constrained by optical interferometry", (C.E. Jones), December 2016.
- HOU, R., "Optical characterization of anisotropic interfaces", (F. Lagugne-Labarthe), June 2016.
- MARTINEZ, T., "High Resolution Spectroscopy of the Hyades Giants", (D.F. Gray), December 2016.
- MCCULLOUGH, E., "A new technique for interpreting depolarization measurements using the CRL atmospheric lidar in the Canadian High Arctic", (R.J. Sica), June 2016, now a researcher at Dalhousie University, Halifax, NS, Canada.
- PATEL, P., "The Inner, Gaseous Disks of Herbig Be Stars", (A. Sigut and J. Landstreet), June 2016, now an Outreach Coordinator CPSX at the Western University, London, ON, Canada.
- RAHMANI, S., "What governs star formation in galaxies? A modern statistical approach", (P. Barmby), October 2016.
- RAJABI, F., "Dicke's Superradiance in Astrophysics", (M. Houde), February 2017, now a Research Assistant at the University of Western Ontario, London, ON, Canada.
- SHANNON, M., "The spectral variability of astronomical PAHs", (E. Peeters), October 2016.
- TAMMOUR, A., "Insights from Unsupervised Clustering and Composite Spectral Analysis Into the Physical Properties Driving Emission and Absorption in Quasar UV/Optical Spectra", (S. Gallagher), June 2016.
- VULIC, N., "X-ray Populations in the Local Group: Insights with Hubble & Chandra", (P. Barmby and S. Gallagher), October 2016, now a Postdoctoral Fellow at the NASA Goddard Space Flight Centre, Greenbelt, MD, USA.
- YE, Q., "Aging comets and their meteor showers", (P.G. Brown), October 2016, now a Postdoctoral Astronomer at the California Institute of Technology, Pasadena, CA, USA.
- YORK UNIVERSITY**
- CAPRA, A., "Testing CPT and Antigravity With Trapped Antihydrogen at LPHA", (S. Menary), February 2016, now a Research Associate at TRIUMF, Vancouver, BC, Canada.
- CHAJET, L., "Disc Winds and Line-Width Distributions in Active Galactic Nuclei", (P. Hall), February 2016, now searching for employment.
- ESHELMAN, E., "Stand-Off Detection of Organic Compounds On Mars Using Ultraviolet Raman-Spectroscopy and Time-Resolved Laser Induced Fluorescence", (M. Daly), June 2016, now a Postdoctoral Fellow at the Jet Propulsion Laboratory, Pasadena, CA, USA.
- FITZAKERLEY, D., "Antihydrogen Via Two-Stage Charge Exchange", (E. Hessels), February 2016, now a Laboratory Technician at the McMaster University, Hamilton, ON, Canada.
- HASHEMI POUR, B., "Multiscale Modelling of Molecules and Continuum Mechanics Using Bridging Scale Method", (G. Zhu), October 2016, now a Sessional Lecturer at York University, Toronto, ON, Canada.
- PALACINO CAVIEDES, G., "Search for Magnetic Monopoles in 8 TEV Centre-of-Mass Energy Proton-Proton Collisions with the Atlas Detector at the LHC", (W. Taylor), February 2016, now a Postdoctoral Fellow at the University of Indiana, Bloomington, Indiana, USA, but based at CERN, Geneva, Switzerland.
- ROGERSON, J., "The Variability of Outflows in Active Galactic Nuclei", (P. Hall), October 2016, Educator, Telus Spark, Calgary, AB, Canada.
- SCHENK, G., "On The Role of Projectile Electrons in an Independent Electron Model Description of Dressed-Ion Impact on Atoms", (T. Kirchner), October 2016, now Searching for employment in Germany.
- WURTZ, M., "Higgs and Heavy Meson Lattice Spectroscopy", (R. Lewis), February 2016, now a Financial Risk Manager, Prism Valuation, Toronto, ON, Canada.

The list of PhD Degrees awarded in the following universities will be included in the next issue (No. 2) :

*La liste des doctorats décernés par les universités suivantes sera incluse dans le prochain numéro (no. 2) :*

Brock University, Carleton University, McGill University, Queen's University, Simon Fraser University, University of Alberta, and/et University of Victoria