

Mme Karyn LE HUR: Supervision of Students and Post-Doctoral Fellows

PhD students:

- [Magali Korolev](#) (CPHT Ecole Polytechnique)

I have supervised the stage M2 of Magali Korolev (ENS Paris and Ecole Polytechnique) on fractional charges in Luttinger liquids and she will officially start her PhD thesis October 2024.

- [Sariah Al Saati](#) (CPHT Ecole Polytechnique)

I am supervising the PhD thesis of Sariah Al Saati on New Topological Semimetals and Geometrical Aspects since October 2022.

- [Frederick del Pozo](#) (CPHT Ecole Polytechnique)

I am supervising the PhD thesis of Frederick del Pozo since October 2021 related to topological quantum field theories and topological superconducting wires, graduation December 2024.

- [Ephraim Bernhardt](#) (CPHT Ecole Polytechnique) (2020-2023)

I have supervised the PhD thesis of Ephraim Bernhardt since 2020 on many-body localization, gauge theories and interacting topological phases of matter; PhD funded by the DFG FOR2414.

Ephraim has successfully graduated September 18th 2023 and he has accepted a permanent position at McKinsey Berlin.

- [Julian Legendre](#) (CPHT Ecole Polytechnique) (2019-2022)

I have supervised the PhD thesis of Julian Legendre (2019-2022) on new topological phenomena related to Kagome materials, and quantum circuit light-matter analogues; funding from ANR BOCA.

Julian has successfully graduated September 15th 2022 and he is now a postdoctoral fellow in the group of Thomas Schmidt at University of Luxembourg.

- [Philipp Klein](#) (CPHT Ecole Polytechnique) (2018-2021)

I have supervised the PhD thesis of Philipp Klein since 2018 on Novel quantum Interfaces and Topological Phases. Philipp has done his Master at Universities of Koeln and Toronto, under the supervision of A. Rosch and Y.-B. Kim. Philipp has found a permanent position at the Millenium Company before the end of his PhD. Philipp has successfully graduated September 8th 2021. He is now a quant Alpha Researcher at Abu Dhabi.

- [Fan Yang](#) (CPHT Ecole Polytechnique) (2017-2020)

I have supervised the PhD thesis of Fan Yang on topological phases (2017-2020) after M1 and M2 Master projects. Fan was funded by the German DFG for a project on Artificial Gauge Fields and Topological Phases. Fan Yang was then a postdoctoral fellow in Stockholm with Emil Bergholtz and she is now at EPFL Lausanne in the group of Giuseppe Carleo to pursue her scientific journey.

- [Ariane Soret](#) (CPHT Ecole Polytechnique and Technion Israel) (2016-2019)

I have co-supervised the PhD thesis of Ariane Soret with E. Akkermans on superconductivity, mesoscopic and interaction effects, long-range forces and light phenomena. Ariane has defended her PhD thesis September 13th 2019. Post-doctoral associate in the group of Cristiano Ciuti in Paris and now in Luxembourg in the group of Frank Esposito.

- [Loïc Henriot](#) (CPHT Ecole Polytechnique) (2013-2016)

I have been supervising the PhD student Loïc Henriot on Non-Equilibrium Quantum Systems and Light-Matter Interaction. Loïc has been a post-doctoral associate at Barcelona in the group of D. Chang (2016-2019) and he is now Chief Technology Officer at startup PASQAL, permanent position.

• [Loïc Herviou](#) (CPHT Ecole Polytechnique and Laboratoire Pierre Aigrin, ENS Paris) (2014-2017) I have co-supervised the PhD thesis of Loïc Herviou together with Christophe Mora (LPA ENS) on Majorana fermions in condensed-matter systems. Loïc was a post-doctoral fellow at Stockholm in the group of J. Bardarson and in Lausanne in the group of Frederick Mila. He obtained a Research CNRS position in 2023, Section 02, Grenoble.

- [Kirill Plekhanov](#) (CPHT Ecole Polytechnique and LPTMS Orsay) (2015-2018)

I have co-supervised the PhD thesis of Kirill Plekhanov with Guillaume Roux (LPTMS Orsay) on Floquet theory and artificial gauge fields, topological phases. Kirill has already obtained several post-doctoral offers and is now post-doctoral associate in Basel, in the group of J. Klinovaja and D. Loss. He was a then scientific developer on quantum computing at Cambridge. He has accepted a permanent position at Bank of America Merrill Lynch, London, Finance.

- [Tudor Alexandru Petrescu](#) (Yale/Ecole Polytechnique-graduation September 2015)

I have supervised the PhD thesis of Alex Tudor Petrescu in the area of topological insulators in cold atoms and novel phases of light. Alex has obtained a 3-year postdoctoral position in the group of Hakan Tureci at Princeton, and he is now post-doctoral associate in the Quantum Institute at Sherbrooke in Canada. Alexandru has received an offer from Virginia Tech for an Assistant Professor position in 2020. Alexandru Petrescu has also obtained a permanent position from France at Ecole des Mines INRIA Paris that he has accepted.

- [Tianhan Liu](#) (LPTHE Jussieu/CPHT Ecole Polytechnique - graduation September 2015)

I have co-supervised the PhD thesis of Tianhan Liu with Benoît Douçot (LPTHE Lussieu) on interacting topological phases of matter. Tianhan has obtained a 4-year post-doctoral position in the group of D. Kovrizhin at Cambridge and then Oxford.

- [Prasenjit Dutt](#) (PhD student at Yale, graduation August 2013)

I have supervised the PhD thesis of Prasenjit Dutt in the area of non-equilibrium Quantum Transport in Nanosystems. Prasenjit was vice-president of Barclays in New York. Quant/Trader, New-York.

- [Peter Orth](#) (graduation, Yale 2011)

I have supervised the PhD thesis of Peter Orth in the area of cold-atomic systems, Quantum Computation, Novel phases and Quantum Phase Transitions. Peter has successfully graduated in April 2011, and he has been a postdoctoral Fellow at Karlsruhe (Germany), a Junior Group leader in the group of J. Schmalian. He moved to U. Minnesota at Minneapolis. He was assistant professor from 2016 to 2021 at Ames Lab, Iowa in USA, then associate tenure professor. He is now back in Germany as a Professor at Saarlandes University.

- [Francis Song](#) (graduation 2012, Yale)

I have supervised the PhD student Francis Song in the area of quantum computing, many-body entanglement, and Density matrix Renormalization Group (DMRG). Francis was a post-doctoral fellow at New-York University with X.-J. Wang in Theoretical Neuroscience. Francis is now working for Deep Mind in London on Artificial Intelligence.

- [Émilie Dupont](#) (graduation 2006 - Sherbrooke)

I have supervised Émilie Dupont in the area of Mesoscopic physics, Entanglement, and Quantum Computing. Émilie has obtained positions of ATER at the Université Pierre and Marie Curie, Jussieu (Paris, France), at U. Cergy Pontoise and in Caen. Emilie is a Science Teacher presently at CYTech, Cergy-Pontoise.

- [Michel Pioro-Ladrière](#) (graduation, 2005, Sherbrooke)

I have supervised Michel Pioro-Ladrière in co-direction with Andy Sachrajda (NRC Ottawa) in the field of Nanoelectronics and Quantum Computation. Michel has done both theory and experiments. Michel has been a postdoctoral fellow with Tarucha in Japan. In 2006, Michel received the price of the best PhD thesis at Sherbrooke in Science and Engineering.

Michel became my successor (professor) at Sherbrooke university.

- [Georg Seelig](#) (co-direction with Prof. Markus Büttiker, 2000/2002, Geneva)

I have supervised Georg Seelig on strongly-correlated electron problems at the mesoscopic scale, and we have written a paper together on this topics (Physical Review B **65**, 165338 (2002)). Georg went to Bell Labs with Kostya Matveev, and then Georg was a postdoctoral fellow at Caltech working in bio-physics with E. Winfree for a few years. He is Associate Professor at University of Washington Seattle.

- [Urs Ledermann](#) (co-direction with Prof. T.M. Rice in Zürich, 1998/2000)

I co-supervised the PhD Thesis of Urs Ledermann, “Hubbard models and Superconductivity”.

Special Collaborations with PhD students:

I have been collaborating with [Jing Yang](#), PhD student in the group of Andrew Jordan (Rochester University), [Michele Filippone](#), PhD student in the group of Christophe Mora (LPA ENS Paris). M. Filippone has joined the group of P. Brouwer at Freie University Berlin for a post-doc, and then the group of T. Giamarchi in Geneva. Michele has obtained a permanent position at CEA Grenoble. I have collaborated with [Bedoor Alkurtass](#) (UC London) in the group of Sougato Bose. I have also collaborated with [Cécile Repellin](#) (LPA ENS paris and Princeton) in the group of Nicolas Regnault. Cécile Repellin was a post-doctoral fellow at MIT and obtained a CNRS position in France.

- [Wei Wu](#) (visiting PhD student from Academy of Sciences in China, Beijing)

2011, I have been supervising the PhD student Wei Wu on Hubbard models and Cluster Dynamical Mean Field Theory. Wei was then a post-doctoral fellow at Sherbrooke University in the group of André-Marie Tremblay. He obtained a post-doctoral Simons fellow position with Antoine Georges and Michel Ferrero at CPHT and is now associate professor in China at Sun Yat-Sen.

- [Anne-Louise Gadsbølle](#) (Sep 2010-Jan. 2011)

I have supervised the visiting PhD student [Anne-Louise Gadsbølle](#) from Aarhus (Denmark) on D-wave superfluidity of cold atomic fermion systems.

Postdoctoral research Associates:

- [Cyril Elouard](#) (INRIA Lyon, 2022-2023, now Junior Professor at Nancy, Université Lorraine)

Cyril helped me to supervise the PhD student Ephraim Bernhardt with whom we wrote a nice article on quantum dynamo effect. We previously collaborated on JJAs when he was in Rochester with Andrew Jordan.

- [Joel Hutchinson](#) (Ecole Polytechnique 2019-2021, now at University Basel)

Joel Hutchinson has done his PhD at the University of Alberta in Canada with Joseph Maciejko and Frank Marsiglio on condensed-matter systems, high-Tc superconductors and spin-orbit systems. He did a master thesis in Vancouver with Gordon Semenoff on AdS-CFT analogues of quantum Hall systems. Joel has received an NSERC award from

Canada, and came to Ecole Polytechnique through the CIFAR collaboration. Joel is now working at Basel in the group of Jelena Klinovaja and Daniel Loss as a senior postdoctoral fellow.

- [Tal Goren](#) (Ecole Polytechnique 2016-2018, now at ge healthcare)

Tal has done in PhD in Israel at Technion in the group of Eric Akkermans, on novel time-dependent protocols to probe electron systems, such as Ramsey protocols. We have collaborated on this subject during her PhD, and Tal was a post-doctoral fellow in our group working on topological systems in CQED for two years. Tal was funded by Ecole Polytechnique and LabeX PALM. Tal has accepted a position at ge healthcare as algorithm developer in Israel. She is now at Jethex Energy, Haifa.

- [Zoran Ristivojevic](#) (2012-2014 CPHT Ecole Polytechnique, now CNRS Toulouse)

I have been collaborating with Zoran Ristivojevic and Loic Henriot on quantum impurity systems out of equilibrium, stochastic approaches for light-matter interaction and many-body entanglement measures. In 2013-2014, Zoran was funded by Ecole Polytechnique and by a post-doctoral fellowship of the LabeX Palm, Paris-Saclay.

He obtained a permanent CNRS position at Toulouse.

- [Ion Garate](#) (post-doctoral fellow at Yale and now associate professor at Sherbrooke)

I am collaborating with Ion Garate (Yale post-doc, assistant and now associate professor at Sherbrooke University) on the theory of quantum RC circuit with interactions and topological insulators, topological superconductors. Ion has obtained his Tenure position at Sherbrooke.

- [Thomas Schmidt](#) (Yale 2011, now associate professor at university of Luxembourg)

I am collaborating with the postdoctoral fellow, Thomas Schmidt (group of my colleague Prof. Leonid Glazman at Yale and now Junior Group Leader at Basel) in the area of quantum impurity systems, mesoscopic systems and cold atoms. Thomas has obtained an Assistant Professor position at University of Luxembourg, and he has recently obtained his promotion to associate professor.

- [Stephan Rachel](#) (Oct. 2009-2012 Yale, now professor at Melbourne Australia)

Stephan Rachel has obtained a prestigious DFG postdoctoral fellowship from Germany and has chosen to come to Yale under my supervision. Stephan and I have been working in the area of Dirac fermions, topological insulators and many-body entanglement. Stephan was a senior associate at TU Dresden in the group of Matthias Vojta, and he spent a period at Princeton, collaboration with A. Bernevig, before joining Melbourne (Australia) as a Professor in 2017.

- [Jens Koch](#) (Yale, now Professor at Northwestern university)

I have collaborated with the postdoctoral fellow Jens Koch (group of my colleague Prof. Steve Girvin) in the area of Josephson junction arrays and novel correlated many-body phenomena when coupling photons to atoms.

Jens obtained his promotion to Professor in Physics.

- [Doron Bergman](#) (Yale, 2007-2009)

I have supervised the postdoctoral fellow Doron Bergman (PhD in Santa-Barbara with Prof. Leon Balents) in the area of topological zero modes in superconductors and Dirac models, cold atomic systems and high- T_c superconductors. Doron has accepted a position in Big-Data Management, at Tachyus, San Francisco.

- [Adilet Imambekov](#) (Yale, assistant professor at Rice University until July 2012)

I have been collaborating with Adilet Imambekov in the area of non-equilibrium spin dynamics applied to cold atomic systems. Adilet from Kazakhstan did his PhD at Harvard with Eugene Demler, then was a postdoctoral fellow at Yale (group of my colleague Prof. Leonid Glazman) and then obtained a Faculty Position at Rice University. Adilet tragically died in the mountain in an expedition (<http://physicstoday.scitation.org/doi/10.1063/PT.4.1676/full/>) and it is a big loss for all of us (Adilet was brilliant, talented for sport and very kind). We continue to work on our collaborative stochastic project (PhD thesis of Peter Orth, Yale 2011 and PhD thesis of Loic Henriot, CPHT 2016), that we developed based on a pioneer paper by Adilet and colleagues before his PhD (G. Lesovik, A. V. Lebedev, A. O. Imambekov <https://link.springer.com/article/10.1134/1.1494045>).

- [Pavel Vitushinsky, Sherbrooke](#)

I have co-supervised the postdoctoral fellow Pavel Vitushinsky (co-direction with Prof. A. Clerk, McGill) in the area of novel phenomena in nanosystems and non-equilibrium transport.

- [Andriy Nevidomskyy](#) (2005/2006 Sherbrooke, now professor at Rice University)

I have supervised Andriy Nevidomskyy on mesoscopic physics at Sherbrooke. Andriy is now professor at Rice University.

- [Mei-Rong Li](#) (2002/2005 Sherbrooke)

I have supervised Mei-Rong Li on mesoscopic physics and more precisely on noisy quantum dots. Mei-Rong obtained an offer for a tenure track position from Hofstra University (New-York) but declined it and she is working in Mathematical Finance in Canada.

- [John Hopkinson](#) (2002/2004 Sherbrooke)

I have supervised John Hopkinson – PhD student from Rutgers (Piers Coleman) – on the areas high- T_c superconductors, and mesoscopic physics for two years. John then received a prestigious NSERC fellowship and decided to

continue his research experience in Toronto with Hae-Young Kee, on frustrated magnetism. John was at Brandon University, Canada as an Associate Professor and he is now an instructor at UBC British Columbia, Vancouver.

Visiting Scholars:

Summer 2014: I hosted Prof. Henrik Johannesson (U. Goteborg, Sweden) and Prof. Andrew Jordan (U. of Rochester USA). Andrew came back in 2018 at CPHT. Ion Garate (Sherbrooke) has visited us Fall 2016 at Ecole Polytechnique. I collaborated with the assistant professor C.-H. Chung (Taiwan); he took a sabbatical leave (Aug 2009-Jan 2010) in my group at Yale.

Other supervisions and collaborations with postdocs:

Also, I collaborate with post-docs at other institutions: [Greg Fiete](#) (KITP Santa-Barbara, associate professor at the University of Texas at Austin and now professor at Northeastern University), [Angela Kopp](#) (Rutgers University, now working at D. E. Shaw Research in New-York), [Cristina Bena](#) (Santa Barbara IPHT Saclay), [Smitha Vishweshwara](#) (Santa Barbara Urbana Champaign) [Patrik Recher](#) (PhD Bale, postdoc at Stanford, then Emmy Noether position at Wurzburg and now professor at Braunschweig), [Marco Schiro](#) (Princeton, now CNRS IPHT Saclay, College de France), [Ivana Vidanovic Vasic](#) (Frankfurt, now professor in Serbia), [Albolfazl Bayat](#) (UC London, Physics Researcher in China), [Marie Piraud](#) (Munich, now Head of the AI Consultant Team at Helmholtz AI) and recently with [Irakli Titvindze](#) (Frankfurt, and now in Austria at Graz).

Training of intermediate-qualified students:

- 2023: Supervision of 3rd-year PRL students, [Aymane Maaitat](#) and [Clément Roux](#) at Ecole Polytechnique.
 - 2023: Supervision of the 1st-year Master student [Brian Cheung Hang Chung](#), Ecole Polytechnique. Brian is now M2 student at ICFP Paris.
 - 2023: Supervision of 2nd-year Master student [Jayant Raul Rao](#) from ETH Zürich and Ecole Polytechnique. He will do a PhD thesis in Berlin and Munich in the group of Jens Eisert and Ignacio Cirac, February 2024.
 - 2021-2022: Supervision of Master M2 student [Sariah Al Saati](#), ENS Paris ICFP and Ecole Polytechnique; Sariah continues for the PhD in our group.
 - 2020-2021: Supervision of the third-year student [Joshua Benabou](#) at Ecole Polytechnique; Joshua is a PhD student in cosmology at Berkeley.
 - 2020: Supervision of [Ephraim Bernhardt](#) (M2 student, ENS Paris ICFP). Ephraim has successfully graduated his PhD thesis in our group, September 2023.
 - 2020: Supervision of [Han Yu Sit](#), third-year student at Ecole Polytechnique and Singapore, Stage PHY599
 - 2019: Supervision of [Julian Legendre](#) (M2 student, University Paris-Sud and ENS Paris) and [Ephraim Bernhardt](#) (M1 student, ENS Paris). Julian Legendre has successfully graduated September 15th 2022 after a PhD at CPHT in our group.
 - 2018: Supervision of [Andrea Pizzi](#) (M2 student, Ecole Polytechnique Turin and Paris-Saclay, complex systems, ranked 1st 18,7/20), [Vivien Perrin](#) (M2 ENS Paris quantum physics ranked first 18,1/20, third year of ENS Cachan), [Peng Cheng](#) (M1 student at Ecole Polytechnique, high-energy physics). Funding Labex PALM. Andrea was then a PhD student at Cambridge with A. Nunnenkamp and he is now a postdoctoral fellow at Harvard. We have written an article together with Fabrizio Dolcini (ENS Pisa) on the Kuramoto Model. Vivien spent his fourth-year of ENS Cachan at Sherbrooke. He has realized his PhD thesis at LPS Orsay with Pascal Simon. We have written an article in collaboration with the group at Sherbrooke on topological superconducting wires. Peng Cheng is continuing his PhD thesis in high-energy physics. He has successfully graduated from a PhD thesis at CEA Saclay and he is now a postdoctoral associate in Munich. We have written an article on a topological proximity effect in graphene.
 - 2016-2017: Supervision of the third year student at Ecole Polytechnique, [Felicien Appas](#). Felicien has written a paper with us, and is done a PhD at Paris Diderot with Sara Ducci. He is now a postdoctoral fellow at ICFO at Barcelona.
 - 2015-2017: I have been supervising the Master students [Antonio Sclocchi](#) (Turin, Paris-Saclay), [Mme Fan Yang](#) (Master Ecole Polytechnique), and [Thilina Arachige](#) (co-supervision with Julien Laurat, ENS). Mme Fan Yang has continued at the M2 level in our group, and then she started a PhD with us, fall 2017. Fan Yang has successfully graduated at CPHT September 2020, then she joined the group of Emil Bergholtz at Stockholm and she is now a postdoctoral associate in the group of Giuseppe Carleo at EPFL Lausanne. Antonio continues in statistical physics and machine learning, he has done a PhD at LPTMS with S. Franz, and he is now a post-doctoral associate at EPFL Lausanne.
 - [Kirill Plekhanov](#), M2 student from Master M2 ICFP
- I supervised Kirill Plekhanov, on Dirac Materials and Floquet Topological Insulators. Kirill has realized a PhD Thesis

at CPHT, co-direction with Guillaume Roux (LPTMS Orsay). K. Plekhanov was a scientist at Cambridge Quantum Computing after a postdoctoral journey at University of Basel with Jelena Klinovaja. He has accepted a position in Bank of America Merrill Lynch, London.

- [Loïc Herviou](#), M2 student at Ecole Polytechnique

I co-supervised the Master student Loic Herviou on Majorana Fermions, Superconducting Wires in Cavities, with my colleague Christophe Mora (LPA ENS Paris). Loic has pursued at the PhD level. He was a post-doctoral fellow in Stockholm with Jens Bardarson and then Lausanne working with Frederic Mila. He obtained a CNRS Researcher position in 2023.

- [Loic Henriët](#), M2 student at Ecole Polytechnique

I have supervised the Master Student M2 Loic Henriët, Ecole Polytechnique, on driven and dissipative quantum impurity models, January-April 2013. Loic has pursued at the PhD level with us and he is now Scientific Quantum Engineer Chief Officer at Startup Pasqal.

- [Alexis Jouan](#), M2 student (CPHT Ecole Polytechnique)

I have co-supervised the Master student M2 Alexis Jouan, LPA ENS Paris, with Christophe Mora on Majorana fermions in cavity QuantumElectrodynamics environment, Winter 2013. Alexis has done a PhD thesis with Jérôme Lesueur at ESPCI. He was then a post-doctoral fellow in Sydney and a postdoctoral associate at ENS Lyon. Alexis is Maître de Conférences at ESPCI, Paris.

- [Ionut-Dragos Potirniche](#) (CPHT Ecole Polytechnique)

I have supervised the undergraduate student Dragos Potirniche, Princeton, Summer 2012. Dragos is now PhD student at Berkeley with Ehud Altman.

- [Sachin Pathak](#) (CPHT Ecole Polytechnique)

I have supervised the undergraduate student from Bangalore, Sachin Pathak, on QED cavity systems.

- [Mehmet Dogan](#) (Yale)

I have supervised the second year Master student Mehmet Dogan at Yale on many-body physics with photons and atoms. Mehmet has done a PhD thesis in the group of S. Ismail-Beighi on ab-initio calculations, graduation 2017. We have written a paper together with Pierre Nataf. Mehmet was a post-doctoral fellow at Berkeley with Steven Louie. He is now researcher at Oden institute.

- [Ivan Stanic](#) (Masters student, Yale)

I have supervised the student Ivan Stanic in the area of graphene (2007-2009).

- [Daliang Li](#) (Yale)

I have supervised the first-year student Daliang Li at Yale during the summer 2010. Daliang was a PhD student in the group of Prof. W. Skiba at Yale in high-energy physics, and a post-doctoral fellow at John Hopkins. He is now a google researcher on machine learning.

- [Jean-Francois Rupprecht](#) (Master project 2010 Yale)

I have supervised the Master student Jean-Francois Rupprecht from ENS Paris (Feb-July 2010) on bilayer graphene systems, scattering theory and Berry phase. Jean-Francois has written a Master Thesis on this subject and was a PhD student at LPTMC UPMC with O. Benichou, R. Voituriez. He was a post-doctoral fellow at ENS Paris with L. Bocquet and in Singapore with Jacques Prost. Jean-François is now CNRS researcher in Aix-Marseille.

- [Sean Litsey](#) (Yale 2009-2010)

I have supervised the Senior student Sean Litsey on the intriguing phenomenon of ripples in graphene. Sean was a PhD student at UCLA and is now a Applied Machine Learning Data Scientist.

- [Raphael Jeanneret](#) (Master project 2009 Yale)

I have supervised the Master student Raphael Jeanneret from ENS Lyon for a summer project on graphene systems, Dirac fermions, and Applications. Raphael continues in bio-physics, soft matter and hydrodynamics and is now a CNRS Researcher at ENS Paris after a stay in Balearic Islands.

- summer students (2007)

I have supervised the first-year PhD students [Michael Kastoryano](#) and [Joseph Bae](#) at Yale. Michael has done his PhD at Copenhagen with M. Wolff. He was then an assistant professor at Cologne working on quantum information theory and an associate professor at Copenhagen.

- [Philippe Doucet-Beaupré](#) (COOP student 2004/2007, Sherbrooke)

I have supervised the Bachelor student Philippe Doucet-Beaupré on the application of the Wilson Renormalization Group (NRG) approach to the spin-boson model (or Caldeira-Leggett model). He has built a trustable and powerful Numerical Renormalization Group method. We have written a Physical Review Letter together and Philippe is now a PhD student at University of Urbana Champaign USA.

- [Louis Gaudreau](#) (COOP student 2002/2005, Sherbrooke)

I have supervised the Bachelor student Louis Gaudreau during his 3 COOP training courses in the area of Quantum Computing. Louis Gaudreau was a Master student in my group, hired in co-direction with A. Sachrajda at NRC Ottawa. Louis has done a PhD at NRC Ottawa, and then followed an international path in Munich and Barcelona,

and is now back as a scientist, and adjunct professor at University Ottawa.