# **Curriculum Vitae: Karyn Le Hur**

Office Centre de Physique Théorique (CPHT), Ecole Polytechnique and CNRS,

Route de Saclay, France

E-Mail: karyn.le-hur@polytechnique.edu

Web Page: https://www.cpht.polytechnique.fr/cpht/lehur/Karyn.LeHur.html

## **Areas of Research**

- Keywords: Condensed Matter Theory; Many-Body Quantum Systems; Correlation effects; Mesoscopic Physics, Quantum optics and Ultra-cold quantum gases; Quantum Information
- 135 articles including 12 Reviews, h-index 45, 6146 citations, https://scholar.google.com/citations?user=9LsrbzAAAAAJhl=en
- Participation in a Popular Book on Quantum Mechanics, Le Plus Grand des Hasards, Editors Jean-Francois Dars and Anne-Marie Papillaut, 2010, 65 authors, Editions Belin
- 1 Chapter in a Book on Quantum Phase Transitions, Dissipation and Light https://arxiv.org/abs/0909.4822, Taylor and Francis, CRC Press

### **Education**

1994	Maîtrise Physique and Special Courses at Institute IMN Jean Rouxel, Nantes, Mention Bien
1995	DEA de Physique Théorique, ENS Paris, Mention Bien
	Directors Edouard Brézin and Jean Iliopoulos
	Work on Vortices at ESPCI in Superconductors 20/20
1998	Doctoral Degree at LPS Orsay, Theoretical Condensed Matter Physics
	PhD advisor: Bernard Coqblin, Mention Honorable and Félicitations from the Jury (Ph. Nozières, B. Coqblin, B. Douçot, M. Fabrizio, Th. Jolicoeur, H. J. Schulz).
	2 Articles with my PhD Advisor and 4 Articles in Solo including a PRL in 1999
1995 – 98	I had the honour to give a course at U. Cergy-Pontoise on Special Relativity
	I was representative of the LPS Orsay PhD students together with Julien Bobroff

## **Professional Career**

1998 – 2000	Postdoctoral Research Associate, ETH Zürich with T. M. Rice
2000 – 2002	6-year Maitre-assistant position at Geneva University with T. M. Büttiker
2002 – 2006	Assistant and Associate Tenure Professor at Sherbrooke University Canada
2006 – 2012	Associate Professor at Yale University
2010	Qualification of Professor in France

2012 – CNRS Research Director, DR02 and DR01 since 2018, Permanent Position
 2012 – Professeure Chargée de Cours (PCC), Ecole Polytechnique, Temps Partiel

#### **Honours and awards**

2004–2020	Member of the Canadian Institute for Advanced Research
2006	Awards from FQRNT and NSERC
	Special award from Canadian Foundation For Innovation, with S. Charlebois,
2007	Awards from NSF, DOE, DARPA
	Welcome award from YINQE, Yale Center for Nanotechnology with J. Harris,
2006–2012	Member of the Yale Center for Quantum Information and Quantum Materials
2009 – 2011	Invited Professor at ENS Paris, Cergy Pontoise (1 month each), Orsay (2 months)
2012 – 2016	Member of the National Selection Committee for CNRS, Section 02 and Section 03 (1 participation)
2015, 17, 19, 21	Participation in ERC Jury, PE02, consolidator grant
2018 – 2019	Member of the ANR grant committee CE30
2012 – 2018	Member of Editorial Board of Phys. Rev. B
2019 –	Divisional Associate Editor at Physical Review Letters
2020	Outstanding Referee of American Physical Society
2020 –	Prime CNRS, Excellence et Encadrement de la Recherche Scientifique
2012 –	PI of DFG Research Unit FOR2414 on Artificial Gauge Fields and Interactions
2012 –	Awards from Ecole Polytechnique, LabeX PALM, ANR BOCA, NSERC Canada

- Supervision of 20 PhD Students; 14 Postdoctoral Associates; Master and Bachelor Students https://www.cpht.polytechnique.fr/cpht/lehur/Members.pdf
- Around 100 Talks (Conferences, Schools, Colloquia, Seminars)
- Participation Proseminars, ETH Zürich, 1998-2000, "Diagrammatic Approach in Condensed Matter" with Gianni Blatter
- Assistant, Course on Electromagnetism from Ruth Durrer, 2000-02, Université de Genève
- Université de Sherbrooke, 2002-2006, Course on Electromagnetism, Statistical Physics.
  Creation of a course on Mesoscopic Physics for Master and PhD students
- Yale University, 2006-2011: Course on Quantum Mechanics and Natural Phenomena I and II;
  Course on Statistical Physics; LAB on Modern Physics
- 2012—: Ecole Polytechnique, Small Classes on Statistical Physics; Quantum Mechanics I and II; Course and TDs with Blaise Gouteraux on Math in Practice at the Bachelor; 1 class on Introduction to Topological Systems in Class PHY552, Silke Biermann and Luca Perfetti See Video Class 2021 on my web page
  Special Class, 3rd year, Supervision of Research of Felicien Appas and Joshua Benabou 2019—: Organization of Stages PHY595 and 599 with Landry Bretheau and Luca Perfetti