

# Claudio Chamon

## *Curriculum Vitae*

Department of Physics  
Boston University  
590 Commonwealth Ave.  
Boston, MA 02215  
U.S.A.  
(617) 353-5787  
chamon@bu.edu

Home Address:  
135 Maple St.  
Lexington, MA 02420  
U.S.A.  
(781) 862-6489

### Education:

- 1996            **Massachusetts Institute of Technology**  
Ph.D. in Theoretical Physics.    Advisor: Xiao-Gang Wen  
Thesis: "Electronic Conduction and Noise in Strongly Correlated Systems"
- 1991            **Massachusetts Institute of Technology**  
M.S. in Electrical Engineering and Computer Science
- 1989            **Massachusetts Institute of Technology**  
B.S. in Aeronautics and Astronautics

### Research Experience:

- 2007-present    Professor at Boston University.
- 2007-2008      Visiting Professor at MIT.
- 2002-2007      Associate Professor at Boston University.
- 1998-2002      Assistant Professor at Boston University.
- May 2001/02    Visiting Professor at the Université de Paris VII.
- Fall 1999        Member, Intitute for Advanced Study, Princeton.
- 1996-98        Postdoctoral Associate in Condensed Matter Theory  
at the University of Illinois at Urbana-Champaign.    Advisor: Eduardo Fradkin
- 1991-96        Research Assistant in Condensed Matter Theory, MIT.
- 1989-91        Research Assistant in Nonlinear Optics, MIT Research Laboratory of Electronics.
- 1988-89        Undergraduate Research Assistant in Aerodynamics of Sails, MIT Aero/Astro Dept.
- 1987-88        Undergraduate Research Assistant in Avionics, MIT Aero Systems Laboratory.

### Teaching Experience:

- 1998-present    Professor at Boston University
- Graduate        Quantum Computation, Solid State Physics I and II, Statistical Mechanics
- Undergraduate    Quantum Mechanics, Quantum Computation, General (First-year) Physics
- 1990-1994<sup>†</sup>      Principal Instructor of the Physics Laboratory for the MIT Office of Minority Education  
Interphase Program  
<sup>†</sup>Summers

## Awards and Honors:

- 2008 American Physical Society Fellow  
Citation: “For his important theoretical work on the probing of fractional charge and statistics in strongly correlated systems.”
- 1999-2002 Alfred P. Sloan Fellow.
- 1999-2003 National Science Foundation Faculty Early Career Award.
- 1989 Received the Henry Webb Salisbury Award, given to the top student in the graduating class (of over 100 students in '89) of the MIT Dept. of Aeronautics and Astronautics.
- 1987 Placed among the top 100 in the William Lowell Putnam National (USA) Mathematical Competition.
- 1986 Brazil-US Institute of International Education Young Scholar Fellowship - First place in the national selection exam for students to attend college in the US.
- 1984 Third Prize in the International Mathematical Olympiad - Prague, Czechoslovakia.
- 1983 First Prize in the Brazilian Mathematical Olympiad.
- 1983 Top ranked student (of 212 students) - Brazilian Naval High School.

## Service to the Profession:

Organizer, Les Houches summer school on “Topological Aspects in Condensed Matter Physics”, Summer 2014.

Organizer, International Centre for Theoretical Physics (ICTP) Workshop on “Complex Quantum Systems: Non-Ergodicity, Glassiness and Localization”, Trieste, Italy, Summer 2012.

Organizer, Greater Boston Area  $\hbar$ -Meeting (BAhbar), Spring 2009, 2010, and 2011.

Organizer, International Institute for Complex and Adaptive Matter spring schools on “New Phenomena in Quantum Matter”, Rio de Janeiro, Brazil, Spring 2007 and 2010.

Organizer, Institute for Complex and Adaptive Matter workshop on “Frontiers of Science within Nanotechnology”, Boston, Fall 2005.

Organizer, Aspen Center for Physics Workshop on “Dynamics, Structure and Correlations in Glasses”, Summer 2005.

Organizer, Aspen Center for Physics Workshop on “Interactions and Disorder in Metals and Insulators in Two Dimensions”, Summer 2003.

Editor for JSTAT - Journal of Statistical Mechanics: theory and experiment

Referee for Nature, Science, Physical Review Letters, Physical Review B, Europhysics Letters, European Physical Journal B, Nuclear Physics B, Journal of Physics: Condensed Matter

## Graduate Students and Postdocs:

Prof. Prashant Sharma

Ph. D. Student at Boston University, graduated in 2002

Currently Associate Professor at Suffolk University

Prof. Horacio Castillo

Postdoctoral Associate at Boston University, 2000 to 2002

Currently Associate Professor at Ohio University

Dr. Dmitry Green

Ph. D. Student at Yale University, co-advised with Prof. N. Read, graduated in 2001

Currently at Mariner Investment Group, LLC

Prof. Malcolm Kennett

Ph. D. Student at Princeton University, co-advised with Prof. R. Bhatt, graduated in 2002

Currently Associate Professor at Simon Fraser University, Canada

Prof. Claudio Castenovo

Ph. D. Student at Boston University, graduated in 2006

Currently Assistant Professor at the University of Cambridge, UK

Dr. Chang-Yu Hou

Ph. D. Student at Boston University, graduated in 2009

Currently Scientist at Schlumberger Research

Dr. Daniel Charrier

Ph. D. Student at the Université Paul Sabatier, Toulouse, France,

co-advised with Prof. P. Pujol, graduated in 2009

Dr. Andrea Velenich

Ph. D. Student at Boston University, graduated in 2010

Currently a Postdoctoral Fellow at the Broad Institute of MIT and Harvard

Dr. Armin Rahmani

Ph. D. Student at Boston University, graduated in 2011

Currently Assistant Professor at Western Washington University

Dr. Luiz Santos

Ph. D. Student at Harvard University, graduated in 2012

Currently a Postdoctoral Fellow at the University of Illinois at Urbana Champaign

Dr. Garry Goldstein

Ph. D. Student at Harvard University, graduated in 2012

Currently a Postdoctoral Fellow at the University of Cambridge, UK

Dr. Titus Neupert

Ph. D. Student at ETH Zürich, Switzerland, graduated in 2013

co-advised with Prof. M. Sigrist at ETHZ and Dr. C. Mudry at PSI, Switzerland

Currently Assistant Professor at the University of Zürich

Mr. Thomas Iadecola

Currently a Ph. D. Student at Boston University

Mr. Zhicheng Wang

Currently a Ph. D. Student at Boston University

Mr. Po-Hau Huang

Currently a Ph. D. Student at Boston University

Mr. Oleksandr Shtyk

Currently a Ph. D. Student at Harvard University

## Invited talks:

- 2016
- International Institute of Physics, Natal, Brazil  
Workshop on “Quantum Non-Equilibrium Phenomena”  
Invited Talk: “Solving Classical Computational Problems by Annealing a Planar Quantum Vertex Model”
  - Google Quantum Artificial Intelligence Lab  
Seminar (via video): “Solving Classical Computational Problems by Annealing a Planar Quantum Vertex Model”
  - University of Pennsylvania
  - Purdue University  
Seminar: “Braiding Light”
- 2015
- Aspen Center for Physics, winter conference on “Non-equilibrium Quantum Matter  
Invited Talk: “Non-equilibrium steady state design of electronic properties”
  - California Institute of Technology  
Seminar: “Non-equilibrium design of quantum steady states: new and old phases in unusual places”
  - Symposium on “Topological Quantum Information”, Athens, Greece  
Lectures on “Fractionalization”  
(2 lectures of 45min each)  
Invited Talk: “Emergent irreversibility and entanglement spectrum statistics”
  - Symposium on “Crystal and Graphene Science”, Cambridge, MA  
Invited Talk: “Non-equilibrium design of quantum steady states: new and old phases in unusual places”
- 2014
- Nobel Symposium on “New forms of matter: topological insulators and superconductors”, Stockholm, Sweden  
Invited talk: “Fractional Topological Insulators”
  - Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Topology and Entanglement in Correlated Quantum Systems”  
Invited talk: “Accessing topological order in fractionalized liquids with gapped edges”
  - DOE Theoretical Condensed Matter Physics Meeting, Gaithersburg, Maryland  
Invited talk: “Non-equilibrium steady state design of electronic material properties”
  - EPSRC workshop on “Equilibration and Glassiness in Classical and Quantum Systems - Overcoming barriers en route to realisation of adiabatic quantum computations”, Oxford University, UK  
Invited talk: “Non-equilibrium steady state design of electronic properties”
  - Rice University  
Colloquium: “Electron Fractionalization in Physics”
  - Massachusetts Institute of Technology
  - Perimeter Institute for Theoretical Physics  
Seminar: “Emergent irreversibility and entanglement spectrum statistics”
  - Massachusetts Institute of Technology  
Seminar: “Non-equilibrium steady state design of electronic properties”
- 2013
- Aspen Center for Physics, winter conference on “Topological States of Matter”  
Invited Talk: “Fractional Chern Insulators”

- German Physical Society (Deutsche Physikalische Gesellschaft - DPG) Meeting, Regensburg, Germany  
Invited Talk: “Fractional Topological Insulators”
- Boston Area Carbon Nanoscience (BACON) Day, Boston, MA  
Invited Talk: “Driven graphene as a tunable semiconductor with topological properties”
- Euler Symposium on Theoretical and Mathematical Physics, St. Petersburg, Russia  
Invited Talk: “Irrational anyons under an elastic membrane”
- Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Spin Orbit Entanglement: Exotic States of Quantum Matter in Electronic Systems”  
Invited talk: “Irrational anyons under an elastic membrane”
- Brandeis University  
Seminar: “Rényi entropies as a measure of the complexity of counting problems”
- Brown University  
Seminar: “Fractional Topological Insulators”
- Instituto de Ciencia de Materiales de Madrid, Spain  
Seminar: “Driven graphene as a tunable semiconductor with topological properties”

2012

- APS March Meeting, Boston, MA  
Invited Talk: “Fractional Topological Insulators”
- Joint Mathematics Meetings, Boston, MA  
American Mathematical Society Special Session  
Invited Talk: “Fractional topological states in electronic flattened bands with non-zero Chern number”
- Gordon Research Conference on “Correlations and Topology in Electron Systems”  
Invited Talk: “Fractional Topological Insulators”
- Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Itinerant Spin-Orbital Systems: from Magnetic Frustration to Novel Superconductivity”  
Invited talk: “Fractional Topological Insulators”
- Yale University
- University of Virginia  
Seminar: “Fractional Topological Insulators”
- ETH Zürich, Switzerland
- Paul Scherrer Institute, Switzerland
- Perimeter Institute for Theoretical Physics  
Seminar: “Virtual parallel computing and a search algorithm using matrix product states”
- University of Basel, Switzerland
- University of Illinois at Urbana-Champaign  
Seminar: “Zero Modes in Interacting Fermionic Systems: The Closed and Open Cases”
- Boston College  
Seminar: “Zero energy modes and their role in electron fractionalization and topological quantum computing”

2011

- International Institute of Physics “School on Statistical Mechanics”, Natal, Brazil  
Lectures on “Zero modes, Majorana fermions, and Topological qubits”  
(5 lectures of 115min each)
- International Centre for Theoretical Physics “Autumn College on Non-Equilibrium Quantum Systems”, Buenos Aires, Argentina

Lectures on “Zero modes, Majorana fermions, and Topological qubits”  
(3 lectures of 90min each)

- International Centre for Theoretical Physics, Trieste, Italy  
Workshop and School on “Topological Aspects of Condensed Matter Physics”  
Invited Talk: “Fractional quantum Hall states at zero magnetic field”
- Paul Scherrer Institute, Switzerland  
Seminar: “Zero modes in electronic systems”
- Universidade Federal de Pernambuco
- Universidade Federal Fluminense  
Seminar: “Modos de Majorana para computação quântica” – presented in Portuguese
- University of Oxford
- University of British Columbia
- University of Toronto  
Seminar: “Fractional quantum Hall states at zero magnetic field”
- Simon Fraser University  
Colloquium: “Zero energy modes and their role in electron fractionalization and topological quantum computing”

2010

- Nobel Symposium on “Graphene and Quantum Matter”, Stockholm, Sweden  
Invited talk: “Classification of all possible mass gaps in graphene, and fractional exchange statistics of topological defects”
- Perimeter Institute for Theoretical Physics  
Conference on “Emergence and Entanglement”  
Invited talk: “Quantum mechanical and information theoretic view on classical glass transitions”
- Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Quantum Information Concepts for Condensed Matter Problems”  
Invited talk: “Quantum mechanical and information theoretic view on classical glass transitions”
- Johns Hopkins University
- National High Magnetic Field Laboratory, Tallahassee, Florida  
Seminar: Electron fractionalization in two-dimensional graphenelike structures

2009

- APS March Meeting, Pittsburgh, PA.  
Invited Talk: “Electron fractionalization in two-dimensional graphenelike structures”
- International Centre for Theoretical Physics “Summer College on Nonequilibrium Physics: from Classical to Quantum Low Dimensional Systems”, Trieste, Italy  
Lectures on “Quantum Mechanics and Glasses”
- Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Topological Order: From Quantum Hall Systems to Magnetic Materials”  
Invited Talk: “Electron fractionalization in two-dimensional graphenelike structures”
- Workshop on “Routes to Superconductivity at Ambient Conditions”, International Center for Condensed Matter Physics, Brasilia, Brazil  
Invited Talk: “Fractionalization of Dirac fermions in graphene-like structures”
- Northwestern University  
Seminar: “Superglasses”
- Princeton University
- University of Oxford
- Northwestern University  
Seminar: “Electron fractionalization in two-dimensional graphenelike structures”

- 2008
- Workshop on “Topological Phases in Condensed Matter”, Institute for Condensed Matter Theory, University of Illinois at Urbana-Champaign  
Invited Talk: “Topological order at finite temperatures”
  - Workshop on “Relativistic Dynamics of Graphene”, Institute for Nuclear Theory, University of Washington  
Invited Talk: “Electron fractionalization in graphene-like structures”
  - Microsoft Research at Station-Q  
Seminar: “Topological order at finite temperatures”
- 2007
- Conference on “Statistical Field Theory of Quantum Devices”, Perugia, Italy  
Invited Talk: “Electron Fractionalization in 2D via Spontaneous Symmetry Breaking in Graphene-like Structures”
  - I2CAM Spring School on “New Phenomena in Highly Correlated Quantum Matter”, Rio de Janeiro, Brazil  
Lectures on the fractional quantum Hall effect
  - Workshop on “Statistical Mechanics of Glassy Systems”  
Laboratoire de Physique Théorique et Hautes Energies, Paris, France  
Invited Talk: “Why glasses? vs. universality in glassy dynamics”
  - Conference on “Mechanical Behavior of Glassy Systems” Pacific Institute of Theoretical Physics, University of British Columbia, Vancouver, Canada  
Invited Talk: “Why glasses? vs. universality in glassy dynamics”
  - Massachusetts Institute of Technology
  - Yale University
  - Simon Fraser University, Canada  
Seminar: “Irrational vs. rational charge and statistics in two-dimensional quantum systems”
- 2006
- APS March Meeting, Baltimore, MD.  
Invited Talk: “Breakdown of One-Parameter Scaling in Quantum Critical Scenarios for the High-Temperature Copper-oxide Superconductors.”
  - Korean Institute for Advanced Study, Seoul, Korea  
Workshop on “Quantum Materials”  
Invited Talk: “ High-temperature criticality is strongly constrained quantum systems.”
  - The 2006 Berkeley Mini Stat-Mech meeting, UC Berkeley  
Invited Talk: “Emergent symmetries in glassy dynamics”
  - Harvard University  
Seminar: “Wormhole geometry for entrapping topologically-protected qubits in non-Abelian quantum Hall states and probing them with voltage and noise measurements”
- 2005
- Lorentz Center, Leiden, The Netherlands  
Workshop on “Complex Behavior in Correlated Electron Systems”  
Invited Talk: “Quantum glassiness.”
  - Center for Mathematical Physics Amsterdam, The Netherlands  
Workshop on “Low-D Quantum Condensed Matter”  
Invited Talk: “Quantum glassiness.”
  - Aspen Center for Physics, winter conference on “High-Temperature Superconductivity”  
Invited Talk: “Breakdown of One-Parameter Scaling in Quantum Critical Scenarios for the High-Temperature Copper-oxide Superconductors.”
  - University of Illinois at Urbana-Champaign  
Seminar: “Quantum glassiness.”

- 2004
- SPIE conference on “Fluctuations and Noise”, Canary Islands  
Invited Talk: “Spatial and mesoscopic fluctuations in glassy dynamics.”
  - Workshop on “Correlated Electrons and Nano Materials”, Boston College.  
Invited Talk: “Y-junctions of Nanowires.”
  - Columbia University
  - Service de Physique Théorique, CEA/Saclay - France  
Seminar: “Quantum glassiness.”
  - Brown University  
Seminar: “Y-junctions of Nanowires.”
- 2003
- Brookhaven National Laboratory  
International Workshop on “Field Theory Methods in Correlated Nanoscale Systems”  
Invited Talk: “Y-junctions of Nanowires.”
  - Kavli Institute for Theoretical Physics, UCSB  
Conference on “Glassy States of Matter and Non-equilibrium Quantum Dynamics.”  
Talk: “Junctions of Quantum Wires and the Dissipative Hofstadter Model.”
- 2002
- Institute for Theoretical Physics - University of Minnesota  
Conference on “Spins and Interactions in Mesoscopic Systems”  
Invited Talk: “Adiabatic spin transport through interacting quantum wires and quantum dots.”
  - Max-Planck-Institut für Physik Komplexer Systeme, Dresden, Germany  
Conference on “Electron Interference and Decoherence in Nanostructures”  
Invited Talk: “Adiabatic spin transport through interacting quantum wires and quantum dots.”
  - Aspen Center for Physics, summer workshop on “Collective Phenomena in Disordered Insulators and Glassy Systems.”  
Talk: “Heterogeneous aging in spin glasses.”
  - Service de Physique d’État Condensé, CEA/Saclay - France  
Seminar: “Adiabatic spin transport through interacting quantum wires and quantum dots.”
  - Harvard University
  - Rutgers University  
Seminar: “Heterogeneous aging in spin glasses”
- 2001
- EU-US workshop on Intrinsic Localized Modes, Crete  
Invited Talk: “Solitons in Carbon Nanotubes.”
  - Third Annual Greater Boston Area Statistical Mechanics Meeting, Brandeis University  
Invited Talk: “Aging in quantum and classical short-range spin glasses”
  - Institut Henri Poincaré, Paris  
Seminar: “Quantum Pumps for Spin and Charge Coherent Transport in Interacting Electronic Systems.”
  - Massachusetts Institute of Technology  
Seminar: “Heterogeneous aging in spin glasses”
  - National High Magnetic Field Laboratory, Tallahassee, Florida  
Seminar: “Interplay Between Disorder and Interactions in Two-dimensional Electronic Systems.”
- 2000
- National Science Foundation, Arlington, VA  
Workshop on Opportunities in Materials Theory 2000



- Invited Talk: “Non-equilibrium dynamics of quantum glassy systems.”
- Centre des Recherches Mathematiques - Université de Montreal  
Workshop on “Integrable Models in Condensed Matter and Non-equilibrium Physics.”  
Invited Talk: “Adsorption on carbon nanotubes: quantum spin tubes, magnetization plateaus, and conformal symmetry.”
  - Brandeis University  
Seminar: “What does shot noise reveals about fractional charge in quantum Hall effect.”
- 1999
- Princeton University
  - Lucent Technologies - Bell Labs.  
Seminar: “Conductance and noise in quantum Hall liquid - normal metal junctions.”
  - Yale University
  - Princeton University
  - University of Illinois at Urbana-Champaign
  - Northeastern University  
Seminar: “Dynamical Schwinger-keldysh approach to disordered and interacting electronic systems.”
- 1998
- APS March Meeting, Los Angeles, CA.  
Invited Talk: “Nonequilibrium quantum noise in the fractional quantum Hall effect: listening to fractional charge.”
  - University of California at Berkeley
  - University of California at Los Angeles
  - Cornell University
  - University of Maryland  
Seminar: “Nonequilibrium quantum noise in the fractional quantum Hall effect: listening to fractional charge.”
- 1997
- Institute for Theoretical Physics, UCSB - workshop on “Field Theories in Low Dimensions.”  
Talk: “A pedagogical introduction to the Keldysh formalism for non-equilibrium quantum field theories and an application to the boundary sine-Gordon Model”
  - Massachusetts Institute of Technology  
Seminar: “How to observe distinct universal conductances in tunneling into fractional Hall states: the role of contacts.”
- 1996
- APS March Meeting, St. Louis, MO.  
Invited Talk: “Nonequilibrium quantum noise in chiral Luttinger liquids.”
  - Aspen Center for Physics, summer workshop on “Transport in Quantum Hall Fluids.”  
Talk: “Quantum noise in the fractional quantum Hall effect.”
  - NATO-Advanced Study Institute, Curacao - workshop on “Mesoscopic Electron Transport.”  
Talk: “Mesoscopics and strongly correlated effects together: the two-point contact interferometer for quantum Hall systems.”
  - University of Illinois at Urbana-Champaign  
Theoretical Physics Seminar: “Localization in two dimensions, Gaussian field theories, and multifractality.”  
Condensed Matter Seminar: “Exchange effects in an artificial atom at high magnetic fields.”

# Claudio Chamon

## Publications

- [133] “Dissipationless conductance in a topological coaxial cable”  
T. Schuster, T. Iadecola, C. Chamon, R. Jackiw, and S.-Y. Pi, *Phys. Rev. B* **94**, 115110 (2016).
- [132] “Non-Abelian Braiding of Light”  
Thomas Iadecola, Thomas Schuster, and Claudio Chamon, *Phys. Rev. Lett.* **117**, 073901 (2016). This publication was featured in the cover of the journal.
- [131] “Wire constructions of Abelian topological phases in three or more dimensions”  
T. Iadecola, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev. B* **93**, 195136 (2016).
- [130] “Non-Abelian topological spin liquids from arrays of quantum wires or spin chains”  
P.-H. Huang, J.-H. Chen, P. R. S. Gomes, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev. B* **93**, 205123 (2016). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.
- [129] “Two-Component Structure in the Entanglement Spectrum of Highly Excited States”  
Z. Yang, C. Chamon, A. Hamma, and E. R. Mucciolo, *Phys. Rev. Lett.* **115**, 267206 (2015).
- [128] “Fractional (Chern and topological) insulators”  
T. Neupert, C. Chamon, T. Iadecola, L. Santos, and C. Mudry, *Phys. Scr.* **T164**, 014005 (2015). Proceedings of the Nobel Symposium 156: “New forms of matter: topological insulators and superconductors”.
- [127] “Driven-dissipative Ising model: Mean-field solution”  
G. Goldstein, C. Aron, and C. Chamon, *Phys. Rev. B* **92**, 174418 (2015).
- [126] “Stroboscopic symmetry-protected topological phases”  
T. Iadecola, L. H. Santos, and C. Chamon, *Phys. Rev. B* **92**, 125107 (2015).
- [125] “Band-edge superconductivity”  
G. Goldstein, C. Aron, and C. Chamon, *Phys. Rev. B* **92**, 020504 (2015).
- [124] “Occupation of topological Floquet bands in open systems”  
T. Iadecola, T. Neupert, and C. Chamon, *Phys. Rev. B* **91**, 235133 (2015).
- [123] “Floquet systems coupled to particle reservoirs”  
T. Iadecola and C. Chamon, *Phys. Rev. B* **91**, 184301 (2015).
- [122] “Photoinduced superconductivity in semiconductors”  
G. Goldstein, C. Aron, and C. Chamon, *Phys. Rev. B* **91**, 054517 (2015).
- [121] “Topological BF theory of the quantum hydrodynamics of incompressible polar fluids”

- A. Tiwari, X. Chen, T. Neupert, L. Santos, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev.* **B 90**, 235118 (2014).
- [120] “Irreversibility and entanglement spectrum statistics in quantum circuits”  
D. Shaffer, C. Chamon, A. Hamma, and E. R. Mucciolo, *J. of Stat. Mech. (JSTAT)*, P12007 (2014).
- [119] “Accessing topological order in fractionalized liquids with gapped edges”  
T. Iadecola, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev.* **B 90**, 205115 (2014).
- [118] “Wire deconstructionism of two-dimensional topological phases”  
T. Neupert, C. Chamon, and C. Mudry, and R. Thomale, *Phys. Rev.* **B 90**, 205101 (2014). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.
- [117] “Effective field theory for the bulk-edge correspondence in a two-dimensional  $Z_2$  topological insulator with Rashba interactions”  
P. R. S. Gomes, P.-H. Huang, C. Chamon, and C. Mudry, *Phys. Rev.* **B 90**, 115144 (2014).
- [116] “Emergent Irreversibility and Entanglement Spectrum Statistics”  
C. Chamon, A. Hamma, and E. R. Mucciolo, *Phys. Rev. Lett.* **112**, 240501 (2014).
- [115] “Fractional Chern Insulators with Strong Interactions that Far Exceed Band Gaps”  
S. Kourtis, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev. Lett.* **112**, 126806 (2014).
- [114] “Topological gaps without masses in driven graphene-like systems”  
T. Iadecola, T. Neupert, and C. Chamon, *Phys. Rev.* **B 89**, 115425 (2014).
- [113] “Generalized energy and time-translation invariance in a driven dissipative system”  
T. Iadecola, C. Chamon, R. Jackiw, and S.-Y. Pi, *Phys. Rev.* **B 88**, 104302 (2013).
- [112] “Measuring the quantum geometry of Bloch bands with current noise”  
T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev.* **B 87**, 245103 (2013).
- [111] “Materials Design from Nonequilibrium Steady States: Driven Graphene as a Tunable Semiconductor with Topological Properties”  
T. Iadecola, D. Campbell, C. Chamon, C.-Y. Hou, R. Jackiw, S.-Y. Pi, and S. Viola Kusminskiy, *Phys. Rev. Lett.* **110**, 176603 (2013). A synopsis of this publication was featured in APS Physics.
- [110] “Cooling through optimal control of quantum evolution”  
A. Rahmani, T. Kitagawa, E. Demler, and C. Chamon, *Phys. Rev.* **A 87**, 043607 (2013).
- [109] “Renyi entropies as a measure of the complexity of counting problems”  
C. Chamon and E. R. Mucciolo, *J. of Stat. Mech. (JSTAT)*, P04008 (2013).
- [108] “Networks of quantum wire junctions: A system with quantized integer Hall resistance without vanishing longitudinal resistivity”  
J. Medina, D. Green, and C. Chamon, *Phys. Rev.* **B 87**, 045128 (2013).

- [107] “Enhancing the stability of a fractional Chern insulator against competing phases”  
A. G. Grushin, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev. B* **86**, 205125 (2012).
- [106] “Magnetic translation algebra with or without magnetic field in the continuum or on arbitrary Bravais lattices in any dimension”  
C. Chamon and C. Mudry, *Phys. Rev. B* **86**, 195125 (2012).
- [105] “Elementary formula for the Hall conductivity of interacting systems”  
T. Neupert, L. Santos, C. Chamon, and C. Mudry, *Phys. Rev. B* **86**, 165133 (2012).
- [104] “Microscopic model of a phononic refrigerator”  
L. Arrachea, E. Mucciolo, C. Chamon, and R. Capaz, *Phys. Rev. B* **86**, 125424 (2012).
- [103] “Exact zero modes in closed systems of interacting fermions”  
G. Goldstein and C. Chamon, *Phys. Rev. B* **86**, 115122 (2012).
- [102] “Junctions of multiple quantum wires with different Luttinger parameters”  
C.-Y. Hou, A. Rahmani, A. Feiguin, and C. Chamon, *Phys. Rev. B* **86**, 075451 (2012).
- [101] “Virtual Parallel Computing and a Search Algorithm using Matrix Product States”  
C. Chamon and E. R. Mucciolo, *Phys. Rev. Lett.* **109**, 030503 (2012).
- [100] “Noncommutative geometry for three-dimensional topological insulators”  
T. Neupert, L. Santos, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev. B* **86**, 035125 (2012).
- [99] “Electron-Phonon Coupling on the Surface of the Topological Insulator  $\text{Bi}_2\text{Se}_3$  Determined from Surface-Phonon Dispersion Measurements”  
X. Zhu, L. Santos, C. Howard, R. Sankar, F. Chou, C. Chamon, M. El-Batanouny, *Phys. Rev. Lett.* **108**, 185501 (2012).
- [98] “Topological Hubbard Model and Its High-Temperature Quantum Hall Effect”  
T. Neupert, L. Santos, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev. Lett.* **108**, 046806 (2012).
- [97] “Masses and Majorana fermions in graphene”  
C. Chamon, C.-Y. Hou, C. Mudry, S. Ryu and L. Santos, The Royal Swedish Academy of Sciences *Phys. Scr.* **T146**, 014013 (2012). Proceedings of the Nobel Symposium 148: “Graphene and Quantum Matter”.
- [96] “General method for calculating the universal conductance of strongly correlated junctions of multiple quantum wires”  
A. Rahmani, C.-Y. Hou, A. Feiguin, M. Oshikawa, C. Chamon, and I. Affleck, *Phys. Rev. B* **85**, 045120 (2012).
- [95] “Decay rates for topological memories encoded with Majorana fermions”  
G. Goldstein and C. Chamon, *Phys. Rev. B* **84**, 205109 (2011). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.

- [94] “Time-reversal symmetric hierarchy of fractional incompressible liquids”  
L. Santos, T. Neupert, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev. B* **84**, 165138 (2011).
- [93] “Interaction of Phonons and Dirac Fermions on the Surface of Bi(2)Se<sub>3</sub>: A Strong Kohn Anomaly”  
X. Zhu, L. Santos, R. Sankar, S. Chikara, C. Howard, F. Chou, C. Chamon, and M. El-Batanouny, *Phys. Rev. Lett.* **107**, 186102 (2011).
- [92] “Fractional topological liquids with time-reversal symmetry and their lattice realization”  
T. Neupert, L. Santos, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev. B* **84**, 165107 (2011).
- [91] “Fluctuations of two-time quantities and time-reparameterization invariance in spin glasses”  
C. Chamon, F. Corberi, and L. F. Cugliandolo, *J. of Stat. Mech. (JSTAT)*, P08015 (2011).
- [90] “Conformal quantum mechanics as the CFT<sub>1</sub> dual to AdS<sub>2</sub>”  
C. Chamon, R. Jackiw, S.-Y. Pi, and L. Santos, *Phys. Lett. B* **701**, 503 (2011).
- [89] “Optimal Control for Unitary Preparation of Many-Body States: Application to Luttinger Liquids”  
A. Rahmani and C. Chamon, *Phys. Rev. Lett.* **107**, 016402 (2011).
- [88] “Fractional Quantum Hall States at Zero Magnetic Field”  
T. Neupert, L. Santos, C. Chamon, and C. Mudry, *Phys. Rev. Lett.* **106**, 236804 (2011). This article was also featured in *Physics* 4, 46 (2011), with an accompanying viewpoint .
- [87] “Heat Pumping in Nanomechanical Systems”  
C. Chamon, E. Mucciolo, L. Arrachea, and R. Capaz, *Phys. Rev. Lett.* **106**, 135504 (2011).
- [86] “Counting Majorana zero modes in superconductors”  
L. Santos, Y. Nishida, C. Chamon, and C. Mudry, *Phys. Rev. B* **83**, 104522 (2011).
- [85] “How to Find Conductance Tensors of Quantum Multiwire Junctions through Static Calculations: Application to an Interacting Y Junction”  
A. Rahmani, C.-Y. Hou, A. Feiguin, C. Chamon, and I. Affleck, *Phys. Rev. Lett.* **105**, 226803 (2010).
- [84] “Exact results on the quench dynamics of the entanglement entropy in the toric code”  
A. Rahmani and C. Chamon, *Phys. Rev. B* **82**, 134303 (2010).
- [83] “Topological superconductors as nonrelativistic limits of Jackiw-Rossi and Jackiw-Rebbi models”  
Y. Nishida, L. Santos, and C. Chamon, *Phys. Rev. B* **82**, 144513 (2010).
- [82] “Topological qubits in graphenelike systems”  
L. Santos, S. Ryu, C. Chamon, and C. Mudry, *Phys. Rev. B* **82**, 165101 (2010).
- [81] “Isolated flat bands and spin-1 conical bands in two-dimensional lattices”  
D. Green, L. Santos, and C. Chamon, *Phys. Rev. B* **82**, 075104 (2010).
- [80] “Quantizing Majorana fermions in a superconductor”

- C. Chamon, R. Jackiw, Y. Nishida, S.-Y. Pi, and L. Santos, *Phys. Rev. B* **81**, 224515 (2010).
- [79] “Quantum mechanical and information theoretic view on classical glass transitions”  
C. Castellano, C. Chamon, and D. Sherrington, *Phys. Rev. B* **81**, 184303 (2010).
- [78] “Superconductivity on the surface of topological insulators and in two-dimensional noncentrosymmetric materials”  
L. Santos, T. Neupert, C. Chamon, and C. Mudry, *Phys. Rev. B* **81**, 184502 (2010).
- [77] “Spanning trees for the geometry and dynamics of compact polymers”  
A. Rahmani, A. Velenich, and C. Chamon, *J. of Stat. Mech. (JSTAT)*, L03004 (2010).
- [76] “String-nets, single- and double-stranded quantum loop gases for non-Abelian anyons”  
A. Velenich, C. Chamon, and X.-G. Wen, *J. of Phys. A - Math. and Theo.* **43**, 172002 (2010).
- [75] “Deconfined fractional electric charges in graphene at high magnetic fields”  
C.-Y. Hou, C. Chamon, and C. Mudry, *Phys. Rev. B* **81** 075427 (2010).
- [74] “Groundstatable fermionic wavefunctions and their associated many-body Hamiltonians”  
D. Charrier and C. Chamon, *Annals of Phys.* **325**, 185 (2010).

- [73] “Masses in graphenelike two-dimensional electronic systems: Topological defects in order parameters and their fractional exchange statistics”  
S. Ryu, C. Mudry, C.-Y. Hou, and C. Chamon, *Phys. Rev. B* **80**, 205319 (2009). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.
- [72] “Long tunneling contact as a probe of fractional quantum Hall neutral edge modes ”  
B. J. Overbosch and C. Chamon, *Phys. Rev. B* **80** 035319, (2009).
- [71] “Toric-boson model: Toward a topological quantum memory at finite temperature”  
A. Hamma, C. Castelnovo, and C. Chamon, *Phys. Rev. B* **79**, 245122 (2009). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.
- [70] “Corner Junction as a Probe of Helical Edge States”  
C.-Y. Hou, E.-A. Kim, and C. Chamon, *Phys. Rev. Lett.* **102**, 076602 (2009).
- [69] “Theory of the superglass phase”  
G. Biroli, C. Chamon, and F. Zamponi, *Phys. Rev. B* **78**, 224306 (2008). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity. The paper was also featured in an APS viewpoint and on Science News magazine.
- [68] “Topological order in a three-dimensional toric code at finite temperature”  
C. Castelnovo and C. Chamon, *Phys. Rev. B* **78**, 155120 (2008).
- [67] “From particles to spins: Eulerian formulation of supercooled liquids and glasses”  
C. Chamon, L. F. Cugliandolo, G. Fabricius, J. L. Iguain, and E. R. Weeks, *Proc. Nat. Acad. Sci. USA* **40**, 15263 (2008).
- [66] “Electron fractionalization for two-dimensional Dirac fermions”  
C. Chamon, C.-Y. Hou, R. Jackiw, C. Mudry, S.-Y. Pi, and G. Semenoff, *Phys. Rev. B* **77**, 235431 (2008).
- [65] “On the Brownian gas: a field theory with a Poissonian ground state”  
A. Velenich, C. Chamon, L. F. Cugliandolo and D. Kreimer, *J. of Phys. A - Math. and Theor.* **41**, 235002 (2008).
- [64] “Scaling and super-universality in the coarsening dynamics of the 3D random field Ising model”  
C. Aron, C. Chamon, L. F. Cugliandolo, and M. Picco, *J. of Stat. Mech. (JSTAT)*, P05016 (2008).
- [63] “Junctions of three quantum wires for spin-1/2 electrons”  
C.-Y. Hou and C. Chamon, *Phys. Rev. B* **77**, 155422 (2009). This publication was selected as Editor’s choice of papers of particular interest, importance, or clarity.
- [62] “Irrational vs. rational charge and statistics in two-dimensional quantum systems”  
C. Chamon, C.-Y. Hou, R. Jackiw, C. Mudry, S.-Y. Pi, and A. P. Schnyder, *Phys. Rev. Lett.* **100**, 110405 (2008).

- [61] “Quantum topological phase transition at the microscopic level”  
C. Castelnovo and C. Chamon, *Phys. Rev.* **B 77**, 054433 (2008).
- [60] “Topological order and topological entropy in classical systems”  
C. Castelnovo and C. Chamon, *Phys. Rev.* **B 76**, 174416 (2007).
- [59] “Entanglement and topological entropy of the toric code at finite temperature”  
C. Castelnovo and C. Chamon, *Phys. Rev.* **B 76**, 184442 (2007).
- [58] “Dynamics of single polymers under extreme confinement”  
A. Rahmani, C. Castelnovo, J. Schmit, and C. Chamon, *J. of Stat. Mech. (JSTAT)*, P09022 (2007).
- [57] “Fluctuations in glassy systems”  
C. Chamon and L. F. Cugliandolo, *J. of Stat. Mech. (JSTAT)*, P07022 (2007).
- [56] “Growing dynamical length, scaling and heterogeneities in the 3d Edwards-Anderson model”  
L. D. C. Jaubert, C. Chamon, L. F. Cugliandolo, M. Picco, *J. of Stat. Mech. (JSTAT)*, P05001 (2007).
- [55] “Electron fractionalization in two-dimensional graphenelike structures”  
C.-Y. Hou, C. Chamon, and C. Mudry, *Phys. Rev. Lett.* **98** 186809 (2007).
- [54] “Fractional statistics and duality: strong tunneling behavior of edge states of quantum Hall liquids in the Jain sequence”  
Claudio Chamon, Eduardo Fradkin, and Ana Lopez, *Phys. Rev. Lett.* **98** 176801 (2007).
- [53] “Zero-temperature Kosterlitz-Thouless transition in a two-dimensional quantum system”  
C. Castelnovo, C. Chamon, C. Mudry, and P. Pujol, *Annals of Phys.* **322** (2007) .
- [52] “Dynamic fluctuations of elastic lines in random environments”  
S. Bustingorry, J. L. Iguain, C. Chamon, L. F. Cugliandolo, D. Dominguez, *Europhys. Lett.* **76**, 856 (2006).
- [51] “Wormhole geometry for entrapping topologically protected qubits in non-abelian quantum Hall states and probing them with voltage and noise measurements”  
Chang-Yu Hou and Claudio Chamon, *Phys. Rev. Lett.* **97**, 146802 (2006).
- [50] “High-temperature criticality in strongly constrained quantum systems”  
C. Castelnovo, C. Chamon, C. Mudry, and P. Pujol, *Phys. Rev.* **B 73**, 144411 (2006).
- [49] “Junctions of three quantum wires”  
M. Oshikawa, C. Chamon, and I. Affleck, *J. of Stat. Mech. (JSTAT)*, P02008 (2006).
- [48] “Fluctuations in the coarsening dynamics of the  $O(N)$  model with  $N \rightarrow \infty$ : are they similar to those in glassy systems?”  
C. Chamon, L. F. Cugliandolo, and H. Yoshino, *J. of Stat. Mech. (JSTAT)*, P01006 (2006).



- [47] “Quantum three-coloring dimer model and the disruptive effect of quantum glassiness on its line of critical points”  
C. Castelnovo, C. Chamon, C. Mudry, and P. Pujol, *Phys. Rev. B* **72**, 104405 (2005).
- [46] “No sliding in time”  
K. Shtengel, C. Nayak, W. Bishara, and C. Chamon, *J. of Phys. A - Math. and Gen.* **38**, L589 (2005).
- [45] “Breakdown of one-parameter scaling in quantum critical scenarios for high-temperature copper-oxide superconductors”  
P. Phillips and C. Chamon, *Phys. Rev. Lett.* **95**, 107002 (2005).
- [44] “Heterogeneous slow dynamics in a two dimensional doped classical antiferromagnet”  
M. P. Kennett, C. Chamon, and L. F. Cugliandolo, *Phys. Rev. B* **72**, 024417 (2005).
- [43] “From quantum mechanics to classical statistical physics: Generalized Rokhsar-Kivelson Hamiltonians and the ”Stochastic Matrix Form” decomposition”  
C. Castelnovo, C. Chamon, C. Mudry, and P. Pujol, *Annals of Phys.* **318**, 316 (2005).
- [42] “A sigma-model approach to glassy dynamics”  
C. Chamon and L. F. Cugliandolo, *Pramana-Journal Of Physics* **64**, 1075 (2005) - Sp. Iss. Stat. Phys. Conf.
- [41] “Quantum glassiness in strongly correlated clean systems: an example of topological overprotection”  
Claudio Chamon, *Phys. Rev. Lett.* **94**, 040402 (2005).
- [40] “Out-of-equilibrium dynamical fluctuations in glassy systems”  
C. Chamon, P. Charbonneau, L. F. Cugliandolo, D. Reichman, and M. Sellitto, *J. of Chem. Phys.* **121**, 10120 (2004).
- [39] “Excitations and quantum fluctuations in site-diluted two-dimensional antiferromagnets”  
Eduardo R. Mucciolo, Antonio H. Castro Neto, and Claudio Chamon, *Phys. Rev. B* **69**, 214424 (2004).
- [38] “Dynamical obstruction in a constrained system and its realization in lattices of superconducting devices”  
Claudio Castelnovo, Pierre Pujol, and Claudio Chamon, *Phys. Rev. B* **69**, 104529 (2004).
- [37] “Junctions of three quantum wires and the dissipative Hofstadter model”  
Claudio Chamon, Masaki Oshikawa, and Ian Affleck, *Phys. Rev. Lett.* **91**, 206403 (2004).
- [36] “Spatially heterogeneous ages in glassy systems”  
H. E.Castillo, C. Chamon, L. F. Cugliandolo, J. L. Iguain, and M. P Kennett, *Phys. Rev. B* **68**, 134442 (2003).
- [35] “Adiabatic charge and spin transport in interacting quantum wires”  
Prashant Sharma and Claudio Chamon, *Phys. Rev. B* **68**, 035321 (2003).
- [34] “Separation of time scales and reparametrization invariance for aging systems”  
C. Chamon, M. P Kennett, H. E.Castillo, and L. F. Cugliandolo, *Phys. Rev. Lett.* **89**, 217201 (2002).

- [33] “Anomalous quantum diffusion at the superfluid-insulator transition”  
Claudio Chamon and Chetan Nayak, *Phys. Rev. B* **66**, 094506 (2002).
- [32] “Adiabatic quantum pump of spin-polarized current”  
E. R. Mucciolo, C. Chamon, and C. M. Marcus, *Phys. Rev. Lett.* **89**, 146802 (2002).
- [31] “Heterogeneous aging in spin glasses”  
H. E. Castillo, C. Chamon, L. F. Cugliandolo, and M. P. Kennett, *Phys. Rev. Lett.* **88**, 237201 (2002).
- [30] “Geometric frustration and magnetization plateaus in quantum spin and Bose-Hubbard models on tubes”  
Dmitry Green and Claudio Chamon, *Phys. Rev. B* **65**, 104431 (2002).
- [29] “P-wave pairing and ferromagnetism in the metal-insulator transition in two dimensions”  
Claudio Chamon, Eduardo R. Mucciolo, and Antonio H. Castro Neto, *Phys. Rev. B* **64**, 245115 (2001).
- [28] “Microscopic electronic inhomogeneity in the high-Tc superconductor  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ ”  
S. H. Pan, J. P. O’Neal, R. L. Badzey, C. Chamon, H. Ding, J. R. Engelbrecht, Z. Wang, H. Eisaki, S. Uchida, A. K. Gupta, K. W. Ng, E. W. Hudson, K. M. Lang, J. C. Davis, *Nature* **413**, 282 (2001).
- [27] “Aging dynamics of quantum spin glasses of rotors”  
Malcolm P. Kennett, Claudio Chamon, and Jinwu Ye, *Phys. Rev. B* **64**, 224408 (2001).
- [26] “Quantum pump for spin and charge transport in a Luttinger liquid”  
Prashant Sharma and Claudio Chamon, *Phys. Rev. Lett.* **87**, 096401 (2001).
- [25] “Time Reparametrization Group and the Long Time Behavior in Quantum Glassy Systems”  
Malcolm P. Kennett and Claudio Chamon, *Phys. Rev. Lett.* **86**, 1622 (2001).
- [24] “Density of states for dirty d-wave superconductors: A unified and dual approach for different types of disorder”  
Claudio Chamon and Christopher Mudry, *Phys. Rev. B* **63**, 100503(R) (2001).
- [23] “Nonperturbative Saddle Point for the Effective Action of Disordered and Interacting Electrons in 2D”  
Claudio Chamon and Eduardo R. Mucciolo, *Phys. Rev. Lett.* **85**, 5607 (2000).
- [22] “Adsorption on carbon nanotubes: quantum spin tubes, magnetization plateaus, and conformal symmetry”  
Dmitry Green and Claudio Chamon, *Phys. Rev. Lett.* **85**, 4128 (2000).
- [21] “Non-equilibrium tunneling into general quantum Hall edge states”  
Joel E. Moore, Prashant Sharma, Claudio Chamon, *Phys. Rev. B* **62**, 7298 (2000).
- [20] “Solitons in Carbon Nanotubes”  
Claudio Chamon, *Phys. Rev. B* **62**, 2806 (2000).
- [19] “Colored noise in the fractional Hall effect: duality relations and exact results”  
Claudio Chamon and Denise Freed, *Phys. Rev. B* **60**, 2239 (1999).

- [18] “Schwinger-Keldysh approach to disordered and interacting electron systems: derivation of Finkelstein’s renormalization group equations”  
Claudio Chamon, Andreas W.W. Ludwig, and Chetan Nayak, *Phys. Rev.* **B 60**, 1842, (1999).
- [17] “Noise measurements and fractional charge in fractional quantum Hall liquids”  
Nancy P. Sandler, Claudio de C. Chamon, and Eduardo Fradkin, *Phys. Rev.* **B 59**, 12521 (1999).
- [16] “Andreev reflection in the fractional quantum Hall effect”  
Nancy P. Sandler, Claudio de C. Chamon, and Eduardo Fradkin, *Phys. Rev.* **B 57**, 12324 (1998).
- [15] “Open Luttinger liquids”  
A.H. Castro-Neto, C. de C. Chamon, and C. Nayak, *Phys. Rev. Lett.* **79**, 4629 (1997).
- [14] “Exact calculation of multifractal exponents of the critical wave function of Dirac fermions in a random magnetic field”  
H. E. Castillo, C. de C. Chamon, E. Fradkin, P. M. Goldbart, and C. Mudry, *Phys. Rev.* **B 56**, 10668 (1997).
- [13] “Distinct universal conductances in tunneling to quantum Hall states: The role of contacts”  
Claudio de C. Chamon, Eduardo Fradkin, *Phys. Rev.* **B 56**, 2012 (1997). Also presented as a paper at the American Physical Society March Meeting 1997, *Bull. Am. Phys. Soc.* (1997).
- [12] “Two point-contact interferometer for quantum Hall systems”  
C. de C. Chamon, D. E. Freed, S. A. Kivelson, S. L. Sondhi and X.-G. Wen, *Phys. Rev.* **B 55**, 2331 (1997).
- [11] “Localization in two dimensions, Gaussian field theories, and multifractality”  
Claudio de C. Chamon, Christopher Mudry, and Xiao-Gang Wen, *Phys. Rev. Lett.* **77**, 4194 (1996). Also presented as a paper at the American Physical Society March Meeting 1996, *Bull. Am. Phys. Soc.* (1996).
- [10] “Magnetic field dependence of the level spacing of a small electron droplet”  
O. Klein, D. Goldhaber-Gordon, C. Chamon, and M. A. Kastner, *Phys. Rev.* **B rapid communications 53**, R4221 (1996).
- [9] “Two-dimensional conformal field theory for disordered systems at criticality”  
Christopher Mudry, Claudio Chamon, and Xiao-Gang Wen, *Nucl. Phys.* **B 466**, 383 (1996).
- [8] “Non-equilibrium quantum noise in chiral Luttinger liquids”  
C. de C. Chamon, D. E. Freed, and X.-G. Wen, *Phys. Rev.* **B 53**, 4033 (1996). Also presented as an invited paper at the American Physical Society March Meeting 1996, *Bull. Am. Phys. Soc.* (1996).
- [7] “Instability of the disordered critical points of Dirac fermions”  
Claudio Chamon, Christopher Mudry, and Xiao-Gang Wen, *Phys. Rev.* **B rapid communications 53**, R7638 (1996).

- [6] “Tunneling and quantum noise in one-dimensional Luttinger liquids”  
C. de C. Chamon, D. E. Freed, and X.-G. Wen, *Phys. Rev. B* **51**, 2363 (1995). Also presented as a paper at the American Physical Society March Meeting 1995, *Bull. Am. Phys. Soc.* (1995).
- [5] “Exchange effects in artificial atoms”  
M. A. Kastner, O. Klein, C. de C. Chamon, D. Tang, D. M. Abusch Magder, U. Meirav, Xiao Gang Wen, and S. J. Wind, *Jpn. J. Appl. Phys.* **34**, 4369 (1995).
- [4] “Exchange effects in an artificial atom at high magnetic fields”  
O. Klein, C. de C. Chamon, D. Tang, D. M. Abusch-Magder, U. Meirav, X.-G. Wen, M. A. Kastner, and S. J. Wind, *Phys. Rev. Lett.* **74**, 785 (1995). Also presented as a paper at the 11th International Conference on High Magnetic Fields in the Physics of Semiconductors, edited by D. Heiman, pp. 472-5 (1995).
- [3] “Sharp and smooth boundaries of quantum Hall liquids”  
C. de C. Chamon and X.-G. Wen, *Phys. Rev. B* **49**, 8227 (1994). Also presented as a paper at the American Physical Society March Meeting 1994, *Bull. Am. Phys. Soc.* (1994).
- [2] “Resonant tunneling in the fractional quantum Hall regime”  
C. de C. Chamon and X.-G. Wen, *Phys. Rev. Lett.* **70**, 2605 (1993).
- [1] “Femtosecond time division interferometry technique for measuring the tensor components of  $\chi^{(3)}$ ”  
C. Chamon, C. K. Sun, H. A. Haus, and J. G. Fujimoto, *Appl. Phys. Lett.* **60**, 533 (1992).