

Enrico Rossi

Curriculum Vitae

Department of Physics
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EDUCATION

Ph.D. in Physics, August 2005.
University of Texas at Austin
Advisor: Professor Allan H. MacDonald.

Joint B.S. & M.S. in Engineering Physics, 1998.
Turin Polytechnic, Turin, Italy
Italian Laurea: 110/110 *Summa Cum Laude*

PROFESSIONAL APPOINTMENTS

Assistant Professor. August 2010-Present
Physics Department
William and Mary

Postdoctoral Research Associate. September 2007-August 2010.
Condensed Matter Theory Center, Physics Department
University of Maryland

Postdoctoral Research Associate. 2005-2007.
Physics Department
University of Illinois at Chicago

AWARDS

- NSF-CAREER Award. (2015).
- ACS-PRF Doctoral New Investigator Award. (2013).
- Jeffress Memorial Trust Award in Interdisciplinary Research. (2013).

FUNDING

- **NSF-CAREER** Award, PI. \$475,000 (2015-2020).
“Two-dimensional Van Der Waals systems with tunable spin-orbit coupling.”
- **ONR**, (PI), \$366,000 (2013-2015).
“Electronic properties of graphene on substrates with strong spin-orbit coupling.”
- **ACS-PRF** Doctoral New Investigator Award, (PI), \$100,000 (2013-2015).
“Designer Graphene Nanostructures for Heterogeneous Catalysis.”
- **Jeffress Memorial Trust** Award in Interdisciplinary Research, (PI, Irina Novikova co-PI), \$100,000 (2013-2015)
“Computational Tools for Controlling Thin Films Properties for Optoelectronics and Nanotechnology Applications.”
- **Jeffress Memorial Trust**, (PI), \$35,000, (2011-2014).
“Effects of disorder in graphene and bilayer graphene”
- **William and Mary** Summer Research Grant, \$4,000, (2013).
“Topological-insulators heterostructures”
- **William and Mary** Summer Research Grant, \$4,000, (2012).
“Electronic collective behavior in graphene based systems.”

SYNERGISTIC ACTIVITIES

- Organizer of the Physics module of the GEAR-UP (Gaining Early Advantage and Awareness for Undergraduate Programs) Summer Academy for inner city and economically disadvantaged high school students. Summer 2011.
- Colloquium Coordinator 2013-Present
- Graduate Admission Committee. 2011-2014
- Physics representative on the Steering Committee Meeting for the William and Mary NSF Robert Noyce Teacher Scholarship Program, and the Department of Education Teachers for a Competitive Tomorrow (TCT) program. F2011-Present.
- Colloquium Committee. 2010-2011
- Referee for: Physical Review Letters, Physical Review B, Nature Physics, Nature Nanotechnology, Nature Materials, Nature Communications, Nature Scientific Reports, Journal of Physics: Condensed Matter, European Physics Letters, Nano Letters, Physics Letters A, Journal of Physics A, Physica E.
- Reviewer of Grants Proposals for: NSF, DOE, German-Israeli Foundation for Scientific Research and Development (GIF), Netherlands Foundation for Fundamental Research on Matter (FOM), Chilean National Commission for Scientific and Technological Research (CONICYT).
- Invited participant to the Kavli Institute for Theoretical Physics UCSB, Graphene Program, Spring 2012.

MENTORED STUDENTS AND POSTDOCTORAL ASSOCIATES

- Postdoctoral Research Associates:
Dr. Junhua Zhang, 2011-2015, next: Post-doc UC Riverside; Dr. Driss Badiane, 2014-Present.
- Graduate students:
Christopher Triola (2011-2015), graduated Spring 2015, next: Postdoctoral associate at Nordita; William Dickinson (2012-2013), Martin Rodriguez-Vega (2012-Present), Satrio Gani (2012-Present).
- Undergraduate students:
Jonathan Fischer (2012-2013), graduated with senior thesis Spring 2015, now graduate student in Statistics at UC-Berkeley; Daniel Kang (2014-Present).

COURSES TAUGHT

- Introduction to Mathematical Physics (PHYS 301). Spring 2014, 2015.
- Solid State II (PHYS 742). Spring 2011, 2012, 2013.
- Solid State I (PHYS 741). Fall 2012, 2013, 2014
- Quantum Mechanics I (PHYS 621). Fall 2011.

LIST OF PUBLICATIONS

For each paper a link to the PDF is provided.

Summary

Number of publications and preprints	46
Number of publications in Physical Review Letters	12
Number of publications in Reviews of Modern Physics	1
Number of citations (Google Scholar)	2500
h-index (Google Scholar)	20

Preprints

1. Junhua Zhang, Younghyun Kim, **E. Rossi**, Roman M. Lutchyn,
Topological superconductivity in a multichannel Yu-Shiba-Rusinov chain
Submitted to Phys. Rev. X, [arXiv:1505.05862 \(2015\)](#).
2. Chih-Pin Lu, Martin Rodriguez-Vega, Guohong Li, Adina Luican-Mayer, K. Watanabe, T. Taniguchi, **E. Rossi**, Eva Y. Andrei,
Local and Global Screening Properties of Graphene Revealed through Landau Level Spectroscopy
Submitted to Nano Letters, [arXiv:1504.07540 \(2015\)](#).

In Journals

3. M. Rodriguez-Vega, M. T. Simons, E. Radue, S. Kittiwatanakul, J. Lu, S. A. Wolf, R. A. Lukaszew, I. Novikova, **E. Rossi**,
Effect of inhomogeneties and substrate on the dynamics of the metal-insulator transition in VO₂ thin films
[Phys. Rev. B. **92**, 115420 \(2015\).](#)
4. A. Principi, G. Vignale, **E. Rossi**,
Kondo effect and non-Fermi liquid behavior in Dirac and Weyl semimetals
[Phys. Rev. B Rapid Communication **92**, 041107\(R\) \(2015\).](#)
5. Y. Kim, J. Zhang, **E. Rossi**, R. M. Lutchyn,
Impurity-induced bound states in superconductors with spin-orbit coupling
[Phys. Rev. Lett. **114**, 236804 \(2015\).](#)
6. J. Zhang, R. Nandkishore, **E. Rossi**,
Disorder-tuned selection of order in bilayer graphene
[Phys. Rev. B. **91**, 205425 \(2015\).](#)
7. E. Radue, L. Wang, S.Kittiwatanakul, J. Lu, S.A. Wolf, **E. Rossi**, R.A. Lukaszew, I. Novikova,
Substrate-induced microstructure effects on the dynamics of the photo-induced Metal-insulator transition in VO₂ thin films
[Journal of Optics **17**, 025503 \(2015\).](#)
8. Junhua Zhang, C. Triola, **E. Rossi**,
Proximity effect in graphene-topological insulator heterostructures
[Phys. Rev. Lett. **112**, 096802 \(2014\).](#)
9. C. Triola, **E. Rossi**, A. V. Balatsky,
Effect of a spin-active interface on proximity-induced superconductivity in topological insulators
[Phys. Rev. B. **89**, 165309 \(2014\).](#)
10. Martin Rodriguez-Vega, Jonathan Fischer, S. Das Sarma, **E. Rossi**,
Ground state of graphene heterostructures in the presence of random charged impurities
[Phys. Rev. B **90**, 035406 \(2014\).](#)
11. J. Zhang, **E. Rossi**,
Chiral states in hybrid graphene heterostructures
[Phys. Rev. Lett. **111**, 086804 \(2013\).](#)
12. D. S. L. Abergel, M. Rodriguez-Vega, **E. Rossi**, S. Das Sarma,
Inter-layer excitonic superfluidity in graphene
[Phys. Rev. B. **88**, 235402 \(2013\).](#)
13. Qiuzi Li, **E. Rossi**, S. Das Sarma,
Two-dimensional electronic transport on the surface of 3D topological insulators
[Phys. Rev. B. **86**, 235443 \(2012\).](#)
14. C. Triola, **E. Rossi**,
Screening and collective modes in gapped bilayer graphene
[Phys. Rev. B. **86**, 161408\(R\) Rapid Comm. \(2012\).](#)
15. D. S. L. Abergel, **E. Rossi**, S. Das Sarma,
Inhomogeneity and nonlinear screening in gapped bilayer graphene
[Phys. Rev. B. **86**, 155447 \(2012\).](#)
16. Qiuzi Li, E. H. Hwang, **E. Rossi**,
Effect of charged impurity correlation on transport in monolayer and bilayer graphene,
[Solid State Communications **152**, 1390 \(2012\).](#)
17. **E. Rossi**, J. H. Bardarson, M. S. Fuhrer, S. Das Sarma,
Universal conductance fluctuations in Dirac materials in the presence of long-range disorder,
[Phys. Rev. Lett. **109**, 096801 \(2012\).](#)
18. Qiuzi Li, E. H. Hwang, **E. Rossi**, S. Das Sarma,
Theory of 2D transport in graphene for correlated disorder,
[Phys. Rev. Lett. **107**, 156601 \(2011\).](#)

19. **E. Rossi**, S. Das Sarma,
Inhomogeneous electronic structure, transport gap, and percolation threshold in disordered bilayer graphene,
[Phys. Rev. Lett. **107**, 155502 \(2011\)](#).
20. S. Das Sarma, S. Adam, E. H. Hwang and **E. Rossi**,
Electronic transport in two dimensional graphene,
[Reviews of Modern Physics **83**, 407 \(2011\)](#).
21. **E. Rossi**, J.H. Bardarson, P.W. Brouwer,
Klein Tunneling in Graphene p-n-p Junctions
[ECS Trans. **35**, 271 \(2011\)](#).
22. R. M. Lutchyn, **E. Rossi**, S. Das Sarma,
Spontaneous interlayer superfluidity in bilayer systems of cold polar molecules
[Phys. Rev. A **82**, 061604 Rapid Communication \(2010\)](#).
23. J.-P. Ismer, Ilya Eremin, **E. Rossi**, Dirk K. Morr, G. Blumberg,
Theory of Multiband Superconductivity in Spin-Density-Wave Metals,
[Phys. Rev. Lett. **105**, 037003 \(2010\)](#).
24. S. Das Sarma, E. H. Hwang, **E. Rossi**,
Theory of carrier transport in bilayer graphene
[Phys. Rev. B **81**, 161407 Rapid Communication \(2010\)](#).
Selected as Editor's suggestion.
25. **E. Rossi**, J.H. Bardarson, P.W. Brouwer, S. Das Sarma,
Signatures of Klein tunneling in disordered graphene p-n-p junctions,
[Phys. Rev. B **81**, 121408 Rapid Communication \(2010\)](#).
Selected as Editor's suggestion.
26. **E. Rossi**, D. K. Morr,
Vertex corrections of impurity scattering at a ferromagnetic quantum critical point,
[Phys. Rev. B **81**, 054443 \(2010\)](#).
27. E. H. Hwang, **E. Rossi**, S. Das Sarma,
Theory of thermopower in 2D graphene ,
[Phys. Rev. B. **80**, 235415 \(2009\)](#).
28. S. Adam, E. H. Hwang, **E. Rossi**, S. Das Sarma,
Theory of charged impurity scattering in two dimensional graphene,
Invited review for the graphene special issue of Solid State Communications,
[Solid State Communications **149** 1072 \(2009\)](#).
29. **E. Rossi**, S. Adam, S. Das Sarma,
Effective medium theory of disordered two-dimensional graphene,
[Phys. Rev. B **79**, 245423 \(2009\)](#).
30. **E. Rossi**, S. Das Sarma,
Ground-state of graphene in the presence of random charged impurities,
[Phys. Rev. Lett. **101** 166803 \(2008\)](#).
Featured in the 'Virtual Journal of Nanoscale Science & Technology', **18**, Issue 17, October 27, 2008.
31. R. H. Nyberg, **E. Rossi**, D. K. Morr,
Identifying Collective Modes in $d_{x^2-y^2}$ -wave superconductors via Impurities,
[Phys. Rev. B **78**, 054504 \(2008\)](#).
32. J.-P. Ismer, I. Eremin, **E. Rossi**, Dirk K. Morr,
Dynamical spin susceptibility and the resonance peak in the electron-doped cuprate superconductors,
[Phys. Rev. Lett. **99**, 047005 \(2007\)](#).
33. U. Chatterjee, D. K. Morr, M. R. Norman, M. Randeria, A. Kanigel, M. Shi, **E. Rossi**, A. Kaminski,
H. M. Fretwell, S. Rosenkranz, K. Kadowaki, J. C. Campuzano,
Dynamic Response Functions from Angle Resolved Photoemission Spectra,
[Phys. Rev. B **75**, 172504 \(2007\)](#).

34. **E. Rossi**, D. K. Morr,
Spatially dependent Kondo-effect in quantum corrals,
[Phys. Rev. Lett. **97**, 236602 \(2006\)](#).
Featured in the 'Virtual Journal of Nanoscale Science & Technology', **14**, Issue 25, December 8, 2006.
35. **E. Rossi**, A. S. Nunez, A. H. MacDonald,
Interlayer Transport in Bilayer Quantum Hall Systems,
[Phys. Rev. Lett. **95**, 266804 \(2005\)](#).
36. **E. Rossi**, O. G. Heinonen, A. H. MacDonald,
Dynamics of magnetization coupled to a thermal bath of elastic modes,
[Phys. Rev. B, **72**, 174412 \(2005\)](#).
37. Q. Q. Wang, A. Muller, P. Bianucci, **E. Rossi**, Q. K. Xue, T. Takagahara, C. Piermarocchi, A. H. MacDonald, C. K. Shih,
Decoherence processes during active manipulation of excitonic qubits in semiconductor quantum dots,
[Phys. Rev. B, **72**, 035306 \(2005\)](#).
Featured in the 'Virtual Journal of Nanoscale Science & Technology'. **12**, Issue 3, July 18, 2005.
38. A. A. Burkov, Y. N. Joglekar, **E. Rossi**, A. H. MacDonald,
Collective transport in bilayer quantum Hall systems,
[Physica E **22**, 19 \(2004\)](#).
39. A. H. MacDonald, A. A. Burkov, Y. N. Joglekar, **E. Rossi**,
Collective transport properties of bilayer-quantum-Hall excitonic condensates,
[Physics of Semiconductors **171**, 29, \(2003\)](#).
40. R. Fitzpatrick, **E. Rossi**, and E.P. Yu,
Improved evolution equations for magnetic island chains in toroidal pinch plasmas subject to externally applied resonant magnetic perturbations,
[Physics of Plasmas **8** 4489 \(2001\)](#).
41. R. Fitzpatrick and **E. Rossi**,
Control of tearing modes in toroidal fusion experiments using "designer" error-fields,
[Physics of Plasmas **8**, 2760 \(2001\)](#).
42. I. Furno, C. Angioni, F. Porcelli, H. Weisen, R. Behn, T.P. Goodman, M.A. Henderson, Z.A. Pietrzyk, A. Pochelon, H. Reimerdes, **E. Rossi**,
Understanding sawtooth activity during intense electron cyclotron heating experiments on TCV,
[Nuclear Fusion **41** \(4\), 403, \(2001\)](#).
43. F. Porcelli, A. Airoidi, C. Angioni, A. Bruschi, P. Buratti, F. Califano, S. Cirant, I. Furno, D. Grasso, E. Lazzaro, A.A. Martynov, M. Ottaviani, F. Pegoraro, G. Ramponi, **E. Rossi**, O. Sauter, C. Tebaldi, O. Tudisco,
Modeling of macroscopic magnetic islands in tokamaks,
[Nuclear Fusion **41** \(9\), 1207, \(2001\)](#).
44. F. Porcelli, C. Angioni, R. Behn, I. Furno, T. Goodman, M.A. Henderson, Z.A. Pietrzyk, A. Pochelon, H. Reimerdes, **E. Rossi**, O. Sauter,
Model for humpback relaxation oscillations,
[Nuclear Fusion **40** \(10\), 1691, \(2000\)](#).
45. A. Pochelon *et al.*,
Energy confinement and MHD activity in shaped TCV plasmas with localized electron cyclotron heating,
[Nuclear Fusion **39** \(11Y\), 1807, \(1999\)](#).
46. F. Porcelli, **E. Rossi**, G. Cima, and A. Wootton,
Macroscopic magnetic islands and plasma energy transport,
[Phys. Rev. Lett. **82**, 1458, \(1999\)](#).

INVITED TALKS

1. *From transistors to Majorana fermions: a brief history of the physics of interfaces*
Nordita, Stockholm, Sweden (August 2015).
2. *Two-dimensional heterostructures with spin-orbit coupling*
Physics of Interfaces and Layered Structures, Nordita, Stockholm, Sweden (August 2015).
3. *Dirac materials*
Physics Seminar, James Madison University, Harrisonburg, VA (October 2015).
4. *Kondo Effect in Dirac Materials and Yu-Shiba-Rusinov states in 2D superconductors with spin-orbit coupling*
Physical Sciences Symposia-2015, Boston MA (September 2015).
5. *Interplay of impurities and correlations in bilayer graphene and 2D superconductors with spin-orbit coupling*
Interaction effects in graphene and related materials workshop, San Sebastian, Spain (July 2015)
6. *Kondo effect in Weyl semimetals and impurity states in superconductors with spin orbit coupling* Quantum Matter Seminar, Physics Department, University of Waterloo, Canada (May 2015).
7. *Kondo Effect and Non Fermi Liquid Behavior in Dirac Materials*
Quantum and Dirac Materials for Energy Applications Conference, Santa Fe NM (March 2015).
8. *Two-dimensional heterostructures with spin-orbit coupling*
Condensed Matter Seminar, Center for Complex Quantum Systems, Physics Department, University of Texas at Austin (March 2015).
9. *Effects of interactions and disorder in graphene heterostructures*
Physical Sciences Symposia-2013, Boston MA (September 2013).
10. *Chiral superfluid states in graphene heterostructures*
Colloquium at the School of Physics, Astronomy, and Computational Sciences at George Mason University (November 2012).
11. *Surprises in the electronic transport of graphene and bilayer graphene*
Condensed Matter & Nanophysics Seminar at the Physics Department at the University of Delaware, DE (September 2012).
12. *Graphene: how electrons move and interact in the ultimate flatland*
Colloquium at the Department of Physics at the University of Virginia, Charlottesville, VA (August 2012).
13. *Inhomogenous electronic structure and transport gap in disordered bilayer graphene*
4th International Conference on Smart Materials Structures and Systems (CIMTEC conference), Montecatini, Italy (June 2012).
14. *Electronic transport in graphene*
15th International Workshop on Computational Electronics (IWCE 2012), Madison WI (May 2012).
15. **APS Invited Talk**
Superfluidity in Bilayer Systems of Cold Polar Molecules
2011 APS Southeastern Section in Roanoke, VA (November 2011).
16. *Graphene: the ultimate flatland*
Applied Science Department, William and Mary, Williamsburg, VA (November 2011)
17. *Quantum motion of electrons and holes in the random puddle landscape of graphene*
Centre for the Physics of Materials Seminar, Physics Department, McGill University, Canada (May 2011).
18. **APS Invited talk**
Quantum motion of electrons and holes in the random puddle landscape of graphene
2011 APS March Meeting in Dallas, TX.
19. **ECS Invited talk**
Klein Tunneling in Graphene p-n-p junctions
219th Meeting of Electrochemical Society, Montreal CA (May 2011).

20. *Quantum transport in disordered graphene*
Colloquium at the Computational Materials Science Center at George Mason University, Fairfax, VA (April 2010).
21. *Spontaneous interlayer superfluidity in bilayer systems*
Condensed Matter Seminar at the Department of Physics&Astronomy at the University of Iowa, Iowa city, PA (March 2010).
22. *Transport of massless Dirac Fermions in disordered graphene*
Colloquium at the Department of Physics&Astronomy at the University of Iowa, Iowa city, PA (March 2010).
23. *Quantum transport in graphene: finding the missing “ π ”*
Colloquium at the Department of Physics, College of William & Mary, Williamsburg, VA (February 2010).
24. *Quantum transport in graphene: finding the missing “ π ”*
Colloquium at the Department of Physics&Astronomy at the University of Pittsburgh, Pittsburgh, PA (January 2010).
25. *Klein tunneling in p-n-p graphene junctions*
Nanoelectronics Research Initiative annual review, Gaithersburg, MD (October 2009).
26. *Signatures of Klein tunneling in disordered graphene p-n-p junctions*
CMTC symposium, University of Maryland, College Park, MD (September 2009).
27. *Disorder and quantum transport in graphene*
Condensed Matter Seminar, Texas A&M University (September 2009)
28. *Klein tunneling in disordered graphene p-n-p junctions*
Condensed Matter Seminar, University of Texas at Austin (September 2009)
29. *Disorder and quantum transport in graphene*
SouthWest Academy of Nanoelectronics Annual review (September 2009).
30. *Theory of thermopower in 2D graphene*
Invited talk at the Scuola Normale Superiore, Pisa, Italy (June 2009).
31. **APS Invited talk**
Ground-state of Two-dimensional Graphene in the Presence of Random Charged Impurities, 2009 March Meeting in Pittsburgh, PA.
32. *Graphene: massless electrons in the ultimate flatland*
Colloquium at the Department of Physics at Virginia Tech, Blacksburg, VA (February 2009).
33. *Electronic structure and transport of disordered graphene*
Center for Nanoscale Science and Technology, National Institute of Standards and Technology, Gaithersburg, MD (November 2008).
34. *Graphene: massless electrons in flatland*
Colloquium at the University of Chile, Santiago, Chile (October 2008).
35. *Effective medium theory of disordered two-dimensional graphene*
CMTC symposium, University of Maryland, College Park, MD (October 2008).
36. *Pseudospintronics*
NRI-SRC Annual review, Santa Clara, CA (November 2007).
37. *Impurity-Induced States in 2DEG and d-wave superconductors*
CMTC symposium, University of Maryland, College Park, MD (September 2007).
38. *Neutron resonance in electron-doped cuprates*
Aspen Center for Physics, CO, Novel Aspects of Superconductivity program, (August 2007).
39. *Kondo Effect in Nanostructures*
Argonne National Laboratory, IL (May 2007)
40. *Spatially dependent Kondo-effect in quantum corrals*
University of Illinois at Chicago, Chicago, IL (February 2006).
41. *Effect of Disorder and Thermal Fluctuations on the Transport properties of Quantum Hall Bilayers*
University of Illinois at Chicago, Chicago, IL (February 2005).

CONTRIBUTED TALKS AND POSTERS

Presenter's name is in bold.

1. E. Rossi, **A. Principi**, G. Vignale,
Kondo effect and non-Fermi liquid behavior in Dirac and Weyl semimetals,
APS March meeting, San Antonio, TX (2015). Contributed talk.
2. **S. Gani**, Y. Virgus, E. Rossi,
Twisted Graphene Nanostructures,
APS March meeting, San Antonio, TX (2015). Contributed talk.
3. **D. Badiane**, C. Triola, E. Rossi,
Proximity-induced superconductivity in transition metal dichalcogenides,
APS March meeting, San Antonio, TX (2015). Contributed talk.
4. **M. Rodriguez-Vega**, G. Schwiete, J. Sinova, E. Rossi,
Inverse spin galvanic effect in topological-insulator based heterostructures,
APS March meeting, San Antonio, TX (2015). Contributed talk.
5. **J. Zhang**, Y. Kim, R. Lutchyn, E. Rossi,
Effect of spin-orbit coupling on the topological phase diagram of a Shiba chain,
APS March meeting, San Antonio, TX (2015). Contributed talk.
6. **Y. Kim**, J. Zhang, E. Rossi, R. Lutchyn,
Impurity-induced bound states in superconductors with spin-orbit coupling,
APS March meeting, San Antonio, TX (2015). Contributed talk.
7. **E. Radue**, L. Wang, S. Kittiwatanakul, Jiwei Lu, Stuart Wolf, E. Rossi, R.A. Lukaszew, Irina Novikova,
Study of microstructure effects on the photo-induced Metal-insulator transition in VO₂ thin films grown on Al₂O₃ and TiO₂
APS March meeting, San Antonio, TX (2015). Contributed talk.
8. **S. Gani**, Y. Virgus, C. Triola, E. Rossi,
Twisted MoS₂ bilayers
APS March meeting, Denver, CO (2014). Contributed talk.
9. **M. Rodriguez-Vega**, J. Zhang, C. Triola, E. Rossi,
Effect of long-range disorder on competing orders in bilayer graphene,
APS March meeting, Denver, CO (2014). Contributed talk.
10. **E. Rossi**, Junhua Zhang, C. Triola,
Proximity effect in graphene-topological insulator heterostructures,
APS March meeting, Denver, CO (2014). Contributed talk.
11. **J. Zhang**, R. Nandkishore, E. Rossi,
Disorder-tuned selection of ordered state in bilayer graphene,
APS March meeting, Denver, CO (2014). Contributed talk.
12. **C. Triola**, E. Rossi, A. Balatsky,
Effect of a spin-active interface on proximity-induced superconductivity in topological insulators,
APS March meeting, Denver, CO (2014). Contributed talk.
13. **E. Rossi**,
Chiral and degenerate exciton condensates in graphene-bilayer graphene heterostructures,
Graphene Week, Chemnitz Germany (June 2013). Contributed talk.
14. **C. Triola**, Junhua Zhang, E. Rossi,
Electronic structure of graphene-topological insulator heterostructures,
APS March meeting, Baltimore, MD (2013). Contributed talk.
15. **J. Zhang**, C. Triola, E. Rossi,
Spin textures in graphene-topological insulator heterostructures,
APS March meeting, Baltimore, MD (2013). Contributed talk.
16. **E. Rossi**, Junhua Zhang,
Chiral superfluid states in hybrid graphene heterostructures,
APS March meeting, Baltimore, MD (2013). Contributed talk.

17. **M. Rodriguez-Vega**, J. Fischer, E. Rossi,
Ground state of graphene heterostructures in the presence of charged impurities,
APS March meeting, Baltimore, MD (2013). Contributed talk.
18. **E. Rossi**,
Quantum transport in inhomogeneous graphene and bilayer graphene,
Graphene Week, Delft, The Netherlands (June 2012). Contributed poster.
19. **E. Rossi**, J. Bardarson, M. S. Fuhrer, S. Das Sarma,
Universal conductance fluctuations in Dirac materials in the presence of long-range disorder,
APS March Meeting, Boston, MA (March 2012). Contributed talk.
20. **J. Zhang**, E. Rossi,
Phase coherent states in graphene heterostructure with chiral asymmetry,
APS March Meeting, Boston, MA (March 2012). Contributed talk.
21. **C. Triola**, E. Rossi,
Collective modes in gapped bilayer graphene,
APS March Meeting, Boston, MA (March 2012). Contributed talk.
22. **Q. Li**, E. Hwang, E. Rossi, S. Das Sarma,
Theory of 2D Transport in Graphene for Correlated Disorder,
APS March Meeting, Boston, MA (March 2012). Contributed talk.
23. **E. Rossi**,
Transport in gapless and gapped bilayer graphene,
Graphene Week, College Park, MD (April 2010). Contributed poster.
24. **E. Rossi, S. Das Sarma**,
Transport in gapless and gapped bilayer graphene,
APS March Meeting, Portland, OR, (March 2010). Contributed talk.
25. **E. Rossi**, S. Das Sarma,
Ground-state carrier density in graphene,
Graphene Week, Trieste, Italy (August 2008). Contributed poster.
26. **E. Rossi**, S. Das Sarma,
Ground-state carrier density in graphene,
APS March Meeting, New Orleans, LA (March 2008). Contributed talk.
27. **E. Rossi**, D. K. Morr,
Spatially dependent Kondo effect in quantum corrals,
APS March Meeting, Denver, CO, (March 2007). Contributed talk.
28. **E. Rossi**, D. K. Morr,
Spatially dependent Kondo effect inside quantum corrals,
Workshop on New States of Stable and Unstable Quantum Matter, ICTP Trieste, Italy, (August 2006).
Contributed poster.
29. **E. Rossi**,
Position dependent Kondo-effect in quantum corrals,
International ICAM Workshop NMR/EPR of Correlated Electron Superconductors, Dresden, Germany,
(October 2005). Contributed talk.
30. **E. Rossi**, A. H. MacDonald,
Influence of Disorder on Spontaneous Coherence and Collective Transport in Bilayer Quantum Hall Systems,
APS March Meeting, Los Angeles, CA (USA), (March 2005). Contributed talk.
31. **E. Rossi**, O. G. Heinonen, A. H. MacDonald,
Dynamics of magnetization coupled to a thermal bath of elastic modes,
49th MMM Conference, Jacksonville, FL, (November 2004). Contributed talk.
32. **E. Rossi**, A. H. MacDonald,
Effect of Disorder and Thermal Fluctuations on the Transport Properties of Quantum Hall Bilayers,
12th International Conference on Recent Progress in Many-Body Theories, Santa Fe, (August 2004).
Contributed poster.

- 33. **E. Rossi**, A. H. MacDonald,
Effect of Disorder and Thermal Fluctuations on the Transport properties of Quantum Hall Bilayers,
APS March Meeting, Montreal, Canada, (March 2004). Contributed talk.
- 34. **E. Rossi**, A. H. MacDonald,
Dynamics of Coupled Cantilever-Nanomagnet System,
SPRING 1st Annual Meeting, Austin, TX, (August 2003). Contributed poster.
- 35. **E. Rossi**, A. H. MacDonald,
Spin-transport in magnetic multilayers,
Boulder Summer School in Condensed Matter and Materials Physics: Frontiers of Magnetism, Boulder,
CO, (June-July 2003). Contributed poster.
- 36. **E. Rossi**, A. H. MacDonald,
Collective and Quasiparticle Transport in Quantum Hall Bilayers,
APS March Meeting, Austin, TX, (March 2003). Contributed talk.
- 37. **E. Rossi**, A. H. MacDonald,
Dynamics of Coupled Cantilever-Nanomagnet Systems,
1st International School and Conference on Nanoscale Molecular Mechanics, Maui, HI, (May 2002).
Contributed poster.