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## Jay Deep Sau

### PRESENT EMPLOYER

Assistant Professor at the Condensed Matter Theory, Joint Quantum Institute and Department of Physics, University of Maryland, College Park, MD, 20740.

### EDUCATION

PERIOD	INSTITUTE/BOARD	DEGREE
2002- 2008	Dept. of Physics, UC Berkeley (advisor: M L Cohen)	Ph.D.
1998 - 2002	Indian Institute of Technology, Kanpur ,India	B. Tech, Electrical Engineering
1998	Calcutta Boys School, Kolkata, India	Indian Secondary Certificate

### POSITIONS HELD

PERIOD	INSTITUTE/BOARD	DEGREE
2011-2013	Department of Physics, Harvard University (advisor: B. I. Halperin)	Post-doctoral Fellow
2009-2011	Condensed Matter Theory Center, University of Maryland, College Park (advisor: S. Das Sarma)	Post-doctoral Researcher
2008-2009	Dept. of Physics, UC Berkeley (advisor: M. L. Cohen)	Post-doctoral Researcher

### RESEARCH INTEREST

Main Area of work is in **Condensed Matter Theory** mostly along the lines of understanding quantum mechanical properties of nano-scale systems and materials.

Currently Working on:

- ◆ Topological superconductivity with Majorana fermions.
- ◆ Predicting systems to realize topological superconductivity.
- ◆ Magnetic impurities in superconductors.
- ◆ Competing order and collective modes in low dimensional systems.

### INVITED TALKS AND PRESENTATIONS

- ◆ Invited talk at IAS Program and Croucher Conference on Topological Phases in Condensed Matter and Cold Atomic Systems, Hong Kong University of Science and Technology, December 2015.
- ◆ Invited talk at APS Mid-Atlantic sectional meeting in Morgantown October 2015.
- ◆ Condensed Matter Theory seminar at Johns Hopkins university, September 2015.
- ◆ Invited talk at Howard University, Washington DC, March 2015.
- ◆ Invited talk at Laboratory of Physical Sciences, Maryland, Feb 2015.
- ◆ Invited talk at Sectional APS meeting, Penn State, Oct 2014.
- ◆ Invited talk at EPQHS5, Weizmann Institute, Israel, June 2014.
- ◆ Invited talk at NIMS, Tokyo, Japan, March 2014.
- ◆ Invited talk at the FOM meeting, Netherlands, January 2014.
- ◆ Invited talk at the Argonne Fall Workshop, October 2013.
- ◆ Invited talk at Los Alamos National Laboratory, September 2013.
- ◆ Invited talk at North Eastern University, Boston, August 2013.
- ◆ Invited talk at Beijing, China, June 2013.
- ◆ Invited talk at MIT, Cambridge, May 2013.
- ◆ Invited talk at Agra, India, April 2013.
- ◆ Invited talk at Purdue University, March 2013.
- ◆ Invited talk at Nagoya University, February 2013.
- ◆ Invited talk at the Aspen Center for Physics, January 2013.
- ◆ Invited talk at Yale, September 2012.
- ◆ Invited talk at Trieste, Italy, August 2012.
- ◆ Invited talk at Leiden, Netherlands, July 2012.
- ◆ Invited talk at Royal Holloway College, London, March 2012.
- ◆ Invited talk at March Meeting, Boston, February, 2012.
- ◆ Invited talk at Boston University, USA, February, 2012.
- ◆ Invited talk at Tata Institute of Fundamental Research, India, January, 2012.

- ◆ Invited talk at ICMP conference, India, December, 2011.
- ◆ Invited talk at University of Toronto, September, 2011.
- ◆ Invited talk at Stig Lundqvist Conference, Trieste, Italy, July, 2011.
- ◆ Invited talk at Topological aspects of Condensed Matter Theory Workshop, Trieste, Italy, June 2011
- ◆ Invited for Condensed Matter Seminar at Penn State University, February, 2011.
- ◆ Invited for Condensed Matter Seminar at Stony Brook University, February, 2011.
- ◆ Invited for Condensed Matter Seminar at Ohio State University, February, 2011.
- ◆ Invited for special condensed matter seminar at Harvard University, December 2010.
- ◆ Invited for talk at McGill University, Canada, November 2010.
- ◆ Poster presentation at Physics Frontier Center, University of Maryland College Park., Summer 2010.
- ◆ Invited talk at Aspen center for Physics, Summer 2010.
- ◆ Short presentation at Microsoft Station Q, Santa Barbara, Summer 2010.
- ◆ Invited talk at Lawrence Berkeley National Lab, Spring 2010.
- ◆ Invited talk at Indian Institute of Science, Bangalore, India, November 2009.

### **TEACHING EXPERIENCE**

- ◆ Phys 8A – TA Freshman mechanics and thermodynamics: Fall 2002
- ◆ Phys 240A – TA Graduate solid state – Fall 2004
- ◆ Phys 240B – TA Graduate solid state : superconductivity and many-body theory – Spring 2006
- ◆ Phys 622 – Instructor Graduate Quantum Mechanics – Fall 2013, Fall 2014, Fall 2015
- ◆ Phys 839J - Online Advanced Quantum course offered through EdX - Spring 2015

### **ACADEMIC ACHIEVEMENTS/AWARDS**

- ◆ Alfred P. Sloan Foundation Research Fellowship, 2016
- ◆ National Science Foundation Faculty Early Career Development (CAREER) Award, 2016
- ◆ Richard Ferrell **Distinguished Faculty award** from University of Maryland, 2015
- ◆ Completed a 4 year summer program in Mathematics at the Indian Statistical Institute, Kolkata in 2002
- ◆ Merit Award in Indian National Physics Olympiad Training Camp in 1998
- ◆ Merit Award in Indian National Math Olympiad Training Camp in 1997

### **PUBLICATION LIST FOR JAY D SAU**

#### **1. Bohmian Trajectories for Photons**

Partha Ghose, A. S. Majumdar, S. Guha, J. Sau,  
Phys. Lett. A **290**, Issues 5-6, 19 November 2001, Pages 205-213.

#### **2. Lossy Compression of Individual Sequences**

Published in IEEE Information Theory Workshop, Bangalore, India (2002)  
Sau, J.D.; Bansal, R.K.; Barthwal, N., Information Theory Workshop, 2002.  
Proceedings of the 2002 IEEE , vol., no., pp. 201-, 20-25 Oct. 2002

#### **3. Lempel-Ziv Compression for Countable Alphabet Sources**

Published in IEEE Symposium on Information Theory (2005)  
Bansal, R.K.; Sau, J.D., Proceedings. International Symposium on Information Theory, 2005.  
ISIT 2005, vol., no., pp. 491-494, 4-9 Sept. 2005

#### **4. Observation of the Giant Stark effect in Boron Nitride Nanotubes**

Masa Ishigami, Jay Deep Sau, Shaul Aloni, Marvin L. Cohen, and A. Zettl,  
Phys. Rev. Lett. **94**, 056804 (2005)

#### **5. Symmetry Breaking in Boron Nitride Nanotubes**

Masa Ishigami, Jay Deep Sau, Shaul Aloni, Marvin L. Cohen, and A. Zettl,  
Phys. Rev. Lett. **97**, 176804 (2006)

#### **6. Possibility of Increased Mobility in Ge-Sn Alloy Systems**

Jay Deep Sau and Marvin L. Cohen  
Phys. Rev. B **75**, 045208 (2007)

#### **7. Ab-initio calculation of Phonon-Splitting in Anti-Ferromagnetic ZnCr<sub>2</sub>O<sub>4</sub>**

Kevin T. Chan, Jay D. Sau, Peihong Zhang, and Marvin L. Cohen  
Phys. Rev. B **75**, 054304 (2007)

#### **8. Proposal for a High Mobility Ge-Sn Alloy System**

M.L. Cohen and J.D. Sau  
Proceedings of the 28th International Conference on the Physics of Semiconductors  
AIP Proceedings **893**, 189 (2007)

#### **9. Lossy Source Coding for Individual Sequences with Side Information**

R K Bansal , T. Jacob, J D Sau  
Submitted to the International Journal of Information and Coding Theory (IJICoT) (2008)

#### **10. Ab initio study of the optical properties of Si-XII**

Brad D. Malone, Jay D. Sau, and Marvin L. Cohen

- Phys. Rev. B **78**, 161202 (2008)
- 11. Possible electric-field-induced one-dimensional excitonic insulators in pairs of carbon nanotubes**  
 Jay D. Sau, Marvin L. Cohen  
 Phys. Rev. B **78**, 115436 (2008)
- 12. Energy Levels of Weakly-Coupled Nanostructures: C60/metallic substrates**  
 Jay D. Sau, J. B. Neaton, Hyoung Joon Choi, Steven G. Louie, Marvin L. Cohen  
 Phys. Rev. Lett. **101**, 206804 (2008)
- 13. Ab initio survey of the electronic structure of tetrahedrally bonded phases of silicon**  
 Brad D. Malone, Jay D. Sau, and Marvin L. Cohen  
 Phys. Rev. B **78**, 035210 (2008)
- 14. Amplification of fluctuations in a spinor Bose-Einstein condensate**  
 S. R. Leslie, J. Guzman, M. Vengalattore, Jay D. Sau, Marvin L. Cohen, and D. M. Stamper-Kurn  
 Phys. Rev. A **79**, 043631 (2009)
- 15. Optimizing Anharmonicity in Nanoscale Weak Link Josephson Junction Oscillators**  
 R. Vijay, J. D. Sau, Marvin L. Cohen, and I. Siddiqi  
 Phys. Rev. Lett. **103**, 087003 (2009)
- 16. Theory of domain formation in inhomogeneous ferromagnetic dipolar condensates within the truncated Wigner approximation**  
 Jay D. Sau, S. R. Leslie, D. M. Stamper-Kurn, and Marvin L. Cohen  
 Phys. Rev. A **80**, 023622 (2009)
- 17. Generic New Platform for Topological Quantum Computation Using Semiconductor Heterostructures**  
 Jay D. Sau, Roman M. Lutchyn, Sumanta Tewari, and S. Das Sarma  
 Phys. Rev. Lett. **104**, 040502 (2010)
- 18. A theorem for the existence of Majorana fermion modes in spin-orbit-coupled semiconductors**  
 Sumanta Tewari, Jay D. Sau, S. Das Sarma  
 Annals Phys. **325**, 219-231 (2010)
- 19. Spin squeezing of high-spin, spatially extended quantum fields**  
 Jay D. Sau, S. R. Leslie, Marvin L. Cohen, and D. M. Stamper-Kurn  
 New J. Phys. **12** 085011 (2010).
- 20. Proximity effect at the superconductor-topological insulator interface**  
 Tudor D. Stanescu, Jay D. Sau, Roman M. Lutchyn, and S. Das Sarma  
 Phys. Rev. B **81**, 241310 (2010)
- 21. Majorana Fermions and a Topological Phase Transition in Semiconductor-Superconductor Heterostructures**  
 Roman M. Lutchyn, Jay D. Sau, and S. Das Sarma  
 Phys. Rev. Lett. **105**, 077001 (2010)
- 22. Robustness of Majorana fermions in 2D topological superconductors**  
 Jay D. Sau, Roman M. Lutchyn, Sumanta Tewari, S. Das Sarma  
 Phys. Rev. B **82**, 094522 (2010).
- 23. Antiferromagnetic Spinor Condensates are Quantum Rotors**  
 Ryan Barnett, Jay D. Sau, S. Das Sarma  
 Phys. Rev. A (Rapid Commun.), **82**, 031602 (2010).
- 24. Non-Abelian quantum order in spin-orbit-coupled semiconductors: The search for topological Majorana particles in solid state systems**  
 Jay D. Sau, Sumanta Tewari, Roman Lutchyn, Tudor Stanescu, S. Das Sarma  
 Phys. Rev. B **82**, 214509 (2010, Editor's Suggestion).
- 25. Time reversal non-invariant non-Abelian topological order in non-centrosymmetric superconductors**  
 Parag Ghosh, Jay D. Sau, Sumanta Tewari, S. Das Sarma  
 Phys. Rev. B, **82**, 184525 (2010).
- 26. Universal quantum computation on a semiconductor quantum wire network**  
 Jay D. Sau, Sumanta Tewari, S. Das Sarma  
 Phys. Rev. A **82**, 052322 (2010).
- 27. Diamagnetism from the 6-vertex model and implications for the cuprate superconductors**  
 Jay D. Sau, Sumanta Tewari  
 Phys. Rev. Lett. **107**, 177006 (2011).
- 28. Anisotropic surface transport in topological insulators in proximity to a helical spin density wave**  
 Qiuzi Li, Parag Ghosh, Jay D. Sau, Sumanta Tewari, S. Das Sarma  
 Phys. Rev. B **83**, 085110 (2011).
- 29. The Prediction of a Gapless Topological "Haldane Liquid" Phase in a One-Dimensional Cold Polar Molecular Lattice**  
 J. P. Kestner, Bin Wang, Jay D. Sau, S. Das Sarma  
 Phys. Rev. B **83**, 174409 (2011).

- 30. Controlling non-Abelian statistics of Majorana fermions in semiconductor nanowires**  
 Jay D. Sau, D. J. Clarke, S. Tewari  
*Phys. Rev. B* **84**, 094505 (2011).
- 31. Majorana fermion exchange in quasi-one-dimensional networks**  
 David J. Clarke, Jay D. Sau, and Sumanta Tewari  
*Phys. Rev. B* **84**, 035120 (2011).
- 32. Chiral Rashba spin textures in ultra-cold Fermi gases**  
 Jay D. Sau, Rajdeep Sensarma, Stephen Powell, I. B. Spielman, S. Das Sarma  
*Phys. Rev. B* **83**, 140510(R) (Editor's suggestion) (2011).
- 33. Electrodynamic and Excitonic Intertube Interactions in Semiconducting Carbon Nanotube Aggregates**  
 J. J. Crochet, J. D. Sau, J. G. Duque, S. K. Doorn, and M. L. Cohen  
*ACS Nano*, **5**, 2611 (2011).
- 34. A number conserving theory for topologically protected degeneracy in one-dimensional fermions**  
 Jay D. Sau, B. I. Halperin, K. Flensberg, S. Das Sarma,  
*Phys. Rev. B* **84**, 144509 (2011).
- 35. Topological periodic superconductor-nanowire structures**  
 Jay D. Sau, Chien Hung Lin, Hoi-Yin Hui, S. Das Sarma  
*Phys. Rev. Lett.* **108**, 067001 (2012)
- 36. Quench induced Mott insulator to superfluid quantum phase transition**  
 Jay D. Sau, Bin Wang, S. Das Sarma  
*Phys. Rev. A* **85**, 013644 (2012)
- 37. Probing topological quantum critical points**  
 Sumanta Tewari, J. D. Sau, V. W. Scarola, Chuanwei Zhang, S. Das Sarma  
*Phys. Rev. B* **85**, 155302 (2012)
- 38. Topologically protected surface Majorana arcs and bulk Weyl fermions in ferromagnetic superconductors**  
 Jay D. Sau, S. Tewari, *Phys. Rev. B* **86**, 104509 (2012)
- 39. Experimental and materials considerations for the topological superconducting state in electron and hole doped semiconductors: searching for non-Abelian Majorana modes in 1D nanowires and 2D heterostructures**  
 Jay D. Sau, Sumanta Tewari, S. Das Sarma ,  
*Phys. Rev. B* **85**, 064512 (2012)
- 40. Topological invariants for spin-orbit coupled superconductor nanowires**  
 Sumanta Tewari, Jay D. Sau  
*Phys. Rev. Lett.* **109**, 150408 (2012)
- 41. How to realize a robust practical Majorana chain in a quantum dot-superconductor linear array**  
 Jay D. Sau, S. Das Sarma  
*Nature Communications* **3**, Article number: 964 (2012).
- 42. Topologically non-trivial superfluid phases and Majorana fermions from Kohn-Luttinger effect**  
 M. S. Marienko, Jay D. Sau, Sumanta Tewari  
*arXiv:1202.5784* (2012).
- 43. Conductance beyond the Landauer limit and charge pumping in quantum wires**  
 Jay D. Sau, Takuya Kitagawa, Bertrand I. Halperin  
*Phys. Rev. B* **85**, 155425 (2012)
- 44. Zero bias conductance peak in Majorana wires made of semiconductor-superconductor hybrid structures**  
 Chien-Hung Lin, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* **86**, 224511 (2012).
- 45. Topological minigap in quasi-one-dimensional spin-orbit-coupled semiconductor Majorana wires**  
 Sumanta Tewari, T. D. Stanescu, J. D. Sau, S. Das Sarma  
*Phys. Rev. B* **86**, 024504 (2012)
- 46. To close or not to close: the fate of the superconducting gap across the topological quantum phase transition in Majorana-carrying semiconductor nanowires**  
 Tudor D. Stanescu, Sumanta Tewari, Jay D. Sau, S. Das Sarma  
*Phys. Rev. Lett.* **109**, 266402 (2012)
- 47. On the possibility of the fractional ac Josephson effect in non-topological conventional superconductor-normal-superconductor junctions**  
 Jay D. Sau, Erez Berg, Bertrand I. Halperin  
*arXiv:1206.4596* (2012).
- 48. A Majorana smoking gun for the superconductor-semiconductor hybrid systems**  
 S. Das Sarma, Jay D. Sau, Tudor D. Stanescu  
*Phys. Rev. B* **86**, 220506 (2012)

- 49. Multi-particle Auger dissociation of excitons in shallow doped carbon nanotubes**  
 Jay D. Sau, Jared J. Crochet, Miguel Dimas, Juan G. Duque, Marvin L. Cohen, Stephen K. Doorn  
*J. Phys. Chem. Lett.* 4 (6), 982 (2013)
- 50. Majorana fermions in carbon nanotubes**  
 Jay D. Sau , Sumanta Tewari,  
*Phys. Rev. B* 88, 054503 (2013)
- 51. Shiba impurity bound states as a probe of topological superconductivity and Fermion parity changing quantum phase transitions**  
 Jay D. Sau, Eugene Demler  
*Phys. Rev. B* 88, 205402 (2013)
- 52. Collective modes of the d-density wave state at its relevance to high T<sub>c</sub> superconductors**  
 Jay D. Sau, Ipsita Mandal, Sumanta Tewari, Sudip Chakravarty  
*Phys. Rev. B* 87, 224503 (2013)
- 53. Density of states of disordered topological semiconductor-superconductor hybrid nanowires**  
 J. D. Sau, S. Das Sarma  
*Phys. Rev. B* 88, 064506 (2013)
- 54. Enhanced anti-ferromagnetic exchange between magnetic impurities in a superconducting host**  
 N. Y. Yao, L. I. Glazman, E. A. Demler, M. D. Lukin, J. D. Sau  
*Phys. Rev. Lett.* 113, 087202 (2014).
- 55. Magnetic Field Response and Chiral Symmetry of Time Reversal Invariant Topological Superconductors**  
 E. Dumitrescu, J. D. Sau, S. Tewari  
*Phys. Rev. B* 90, 245438 (2014)
- 56. Mean field theory of competing orders in metals with antiferromagnetic exchange interactions**  
 J. D. Sau, S. Sachdev  
*Phys. Rev. B* 89, 075129 (2014)
- 57. Disorder-induced subgap states and Majorana zero-energy edge modes in 2D topological insulator-superconductor hybrid structures**  
 H-Y Hui, J. D. Sau, S. Das Sarma  
*Phys. Rev. B* 90, 174206 (2014)
- 58. Migdal's theorem and electron-phonon vertex corrections in Dirac materials**  
 B. Roy, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* 89, 165119 (2014)
- 59. Suppressing defect production during passage through a quantum critical point**  
 J. D. Sau, K. Sengupta  
*Phys. Rev. B* 90, 104306 (2014)
- 60. Odd-parity superconductivity from phonon-mediated pairing**  
 P. M. R. Brydon, S. Das Sarma, H-Y Hui, J. D. Sau  
*Phys. Rev. B* 90, 184512 (2014)
- 61. Phase diagram and excitations of a Shiba molecule**  
 N. Y. Yao, C. P. Moca, I. Weymann, J. D. Sau, M. D. Lukin, E. A. Demler, G. Zaránd  
*Phys. Rev. B* 90, 241108(R) (2014)
- 62. Competing charge-density-wave, magnetic and topological ground states at and near Dirac points in graphene in axial magnetic fields**  
 B. Roy, J. D. Sau  
*Phys. Rev. B* 90, 075427 (2014)
- 63. Transport in two-dimensional disordered semimetals**  
 M. Knap, J. D. Sau, B. I. Halperin, E. A. Demler  
*Phys. Rev. Lett.* 113, 186801 (2014)
- 64. Surface Theory of a Family of Topological Kondo Insulators**  
 B. Roy, J. D. Sau, M. Dzero, V. Galitski  
*Phys. Rev. B* 90, 155314 (2014)
- 65. Quasiclassical formalism and a generalized Eilenberger theory for Majorana zero-mode carrying disordered p-wave superconductors**  
 H-Y. Hui, J. D. Sau, S. Das Sarma  
*Phys. Rev. B* 90, 064516 (2014)
- 66. A proposal to probe quantum non-locality of Majorana fermions in tunneling experiment**  
 Jay D. Sau, Brian Swingle, S. Tewari  
*Phys. Rev. B* 92, 020511(R) (2015)
- 67. Magnetic Catalysis and Spontaneous Mass Generation in Weyl Semimetals**  
 B. Roy, J. D. Sau  
*Phys. Rev. B* (in press)
- 68. Topological Shiba chain from spin-orbit coupling**

- P. M. R. Brydon, Hoi-Yin Hui, J. D. Sau  
*Phys. Rev. B* 91, 064505 (2015)
- 69. Majorana fermions in a ferromagnetic wire on the surface of a bulk spin-orbit coupled \$s\$-wave superconductor**  
H-Y Hui, P. M. R. Brydon, Jay D. Sau, S. Tewari, S. Das Sarma  
*Sci. Rep.* 5, 8880 (2015)
- 70. Excitonic and Nematic Instabilities on the Surface of Topological Kondo Insulators**  
Bitan Roy, Johannes Hofmann, Valentin Stanev, Jay D. Sau, Victor Galitski  
arXiv:1410.1868
- 71. Proximity-induced superconductivity and Josephson critical current in quantum spin Hall systems**  
Hoi-Yin Hui, Alejandro M. Lobos, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* 90, 224517 (2014)
- 72. Majorana Fermions in Chiral Topological Ferromagnetic Nanowires**  
Eugene Dumitrescu, Brenden Roberts, Sumanta Tewari, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* 91, 094505 (2015)
- 73. Equivalence of topological mirror and chiral superconductivity in one dimension**  
Eugene Dumitrescu, Girish Sharma, Jay D. Sau, Sumanta Tewari  
*Phys. Rev. B* 92, 045421 (2015)
- 74. Bound states of a ferromagnetic wire in a superconductor**  
Jay D. Sau, P. M. R. Brydon  
arXiv:1501.03149 – *Phys. Rev. Lett.* (in press)
- 75. Universal spin-triplet superconducting correlations of Majorana fermions**  
Xin Liu, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* 92, 014513 (2015)
- 76. Normal state Nernst effect from bi-directional bond density wave state in high  $T_c$  cuprates**  
Girish Sharma, Chunxiao Liu, Kangjun Seo, J. D. Sau, Sumanta Tewari  
arXiv:1502.03812
- 77. Substrate-induced Majorana renormalization in topological nanowires**  
S. Das Sarma, Hoi-Yin Hui, P. M. R. Brydon, Jay D. Sau  
*New J. Phys.* 17, 075001 (2015)
- 78. Conductance spectroscopy of topological superconductor wire junctions**  
F. Setiawan, P. M. R. Brydon, Jay D. Sau, S. Das Sarma  
*Phys. Rev. B* 91, 214513 (2015)
- 79. Dynamical detection of a topological phase transition in one-dimensional spin-orbit-coupled Fermi gases**  
F. Setiawan, K. Sengupta, I. B. Spielman, Jay D. Sau  
arXiv:1503.07167
- 80. Parafermionic zero modes in ultracold bosonic systems**  
Mohammad F. Maghrebi, Sriram Ganeshan, David J. Clarke, Alexey V. Gorshkov, Jay D. Sau  
*Phys. Rev. Lett.* 115, 065301 (2015)
- 81. Is the transition between topological and trivial insulators always continuous?**  
Bitan Roy, Pallab Goswami, Jay D. Sau  
arXiv:1507.00722
- 82. Dirty Weyl semimetals: stability, phase transition and quantum criticality**  
Soumya Bera, Jay D. Sau, Bitan Roy  
arXiv:1507.07551
- 83. Does the bulk disorder in the superconductor affect proximity-induced topological superconductivity?**  
Hoi-Yin Hui, Jay D. Sau, S. Das Sarma  
arXiv:1508.04134
- 84. On correlation between zero bias conductance peaks and topological invariants in semiconductor Rashba nanowires.**  
A Nag, J Sau  
*Bulletin of the American Physical Society* (2016)

85. On correlation between zero bias conductance peaks and topological invariants in semiconductor Rashba nanowires.  
 A Nag, J Sau  
*Bulletin of the American Physical Society* (2016)
86. Spin susceptibility function of helical metal and RKKY interaction  
 C Liu, B Roy, J Sau  
*Bulletin of the American Physical Society* (2016)
87. Effect of disorder on the decreasing the critical value of magnetic field in proximity induced topological superconductors Y  
 Alavirad, CK Chiu, J Sau  
*Bulletin of the American Physical Society* (2016)
88. Superconductor disorder and strong proximity coupling effects in Majorana nanowires  
 W Cole, J Sau  
*Bulletin of the American Physical Society* (2016)
89. Physical Architecture for a Universal Topological Quantum Computer based on a Network of Majorana Nanowires  
 J Sau, M Barkeshli  
*Bulletin of the American Physical Society* (2016)
90. Proximity effect and Majorana bound states in clean semiconductor nanowires coupled to disordered superconductors WS Cole, JD Sau, SD Sarma arXiv preprint arXiv:1603.03780 (2016)
91. How to infer non-Abelian statistics and topological invariants from tunneling conductance properties of realistic Majorana nanowires SD Sarma,  
 A Nag, JD Sau  
 arXiv preprint arXiv:1603.00041 (2016)

#### CITATION STATISTICS FOR JAY D SAU

According to the Google Scholar profile data base, there are a total of around 4006 citations (including two papers with >700 citations each) to the work listed above, which collectively has an h-index of 29 and an i-10 index of 51.