

GAUTAM RUPAK

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Education

- **Ph.D.** in Physics, University of Washington, Seattle, August 2000.
- **M.Sc.** in Physics, University of Washington, Seattle, December 1996.
- **B.A.** (Summa Cum Laude) in Physics and Mathematics, Boston University, Boston, May 1995.

Awards and Honors

- *College Prize for Excellence in Physics*, Boston University, May 3, 1995 awarded for the highest scholastic achievement in the graduating class.
- *College Prize for Excellence in Mathematics*, Boston University, May 21, 1995 awarded for the highest scholastic achievement in the graduating class.
- Member of *Golden Key National Honor Society*.
- Member of *Phi Beta Kappa* honor society.
- Charter member of the Gamma chapter of *Phi Beta Kappa* in the state of Mississippi.

Research Grants

- U.S. National Science Foundation research grant \$270,000 during 9/1/2019-8/31/22 for “Nuclear Structure and Reactions from Effective Field Theory”.
- U.S. National Science Foundation research grant \$264,138 during 7/1/2016-6/30/19 for “Nuclear Structure and Reactions from Lattice Effective Field Theory”.
- U.S. National Science Foundation research grant \$219,393 during 9/1/2013-8/31/16 for “Lattice Effective Field Theory for Radiative Capture Reactions”.
- U.S. National Science Foundation research grant \$219,718 during 9/1/2010-8/31/13 for “Effective Field Theory for Few-Nucleons and Halo Nuclei”.

Professional Affiliations and Service

- Member of the American Physical Society.
- Member of the professional Sigma Xi (ΣX) society.
- Referee for Physical Review Letters, Physical Review A (atomic, molecular and optical physics), Physical Review B (condensed matter physics), Physical Review C (nuclear Physics), Physical Review D (particle physics), Physics Letters B (nuclear and particle physics), Nuclear Physics A (nuclear physics), and European Physical Journal A (hadronic physics).

- Reviewer for U.S. National Science Foundation and Department of Energy grant proposals.
- Reviewer for German Research Foundation (DFG).

Professional Experience

- **Associate Professor** at Mississippi State University, August 2014-present.
- **Assistant Professor** at Mississippi State University, August 2008-2014.
- **Research Assistant Professor** at North Carolina State University, February 2007-August 2008.
- **Postdoctoral Research Associate** at North Carolina State University, July 2006 - January 2007.
- **Postdoctoral Research Associate** at the Institute for Nuclear Theory, Seattle, Nov 2005- June 2006.
- **Postdoctoral Research Associate** at Los Alamos National Lab., October 2003-Aug 2005.
- **Postdoctoral Research Fellow** at Lawrence Berkeley National Lab., October 2001-September 2003.
- **Postdoctoral Research Associate** at the Canadian National Lab. TRIUMF, September 2000 - October 2001.
- **Research Assistant**, for Prof. Martin J. Savage, University of Washington, June 1997 - August 2000. Effective field theory for two-nucleon systems, heavy quark effective field theory and heavy baryon chiral perturbation theory.
- **Undergraduate Senior Project**, advised by Prof. Elizabeth H. Simmons, Boston University, September 1994 - May 1995.
- **Research Experiences for Undergraduates**, advised by Prof. Charles J. Horowitz, Indiana University, May 1994 - July 1994.

Graduate Student Advising

- Lakma Fernando, Ph.D. August 2013. Thesis: Halo nuclei interactions using effective field theory. She received a travel award from DNP to present her research at the APS 2011 April meeting. Lakma also received the Bagley College of Engineering fellowship at MSU 2012-2013 for her academic and research accomplishment. Took a postdoctoral position at North Carolina Central University, Durham after graduation.
- Pranaam Ravi, M.Sc. August 2014. Thesis: Proton-proton scattering in lattice effective field theory. PhD student at Universität Bern, Switzerland.
- Kristopher Katterjohn, M.Sc. August 2015. Thesis: Universal four-fermion interaction in lattice effective field theory. Math instructor at Northwest Mississippi Community College.
- Akshay Vaghani, Ph.D. August 2017. Thesis: “Effective field theory for halo nuclei”. Took a postdoctoral position after graduation, and currently a data scientist at Fractal Analytics, New York.
- Pradeepa Premarathna, Ph.D. candidate. She is expected to graduate by Fall 2020.

Teaching Experience

- **Instructor** for undergraduate/graduate Introduction to Quantum Mechanics II course (PH4723/6723) at Mississippi State University, Spring 2019 (6 graduate students).
- **Instructor** for undergraduate/graduate Introduction to Quantum Mechanics I course (PH4713/6713) at Mississippi State University, Fall 2018 (13 undergraduate and graduate students).
- **Instructor** for undergraduate course on Modern Physics (PH3613) at Mississippi State University, Fall 2015 (10 students), Fall 2016 (9 students), Fall 2017 (8 students).
- **Instructor** for 1st semester introductory calculus based undergraduate service course Physics 1 (PH2213) at Mississippi State University, Spring 2013 (2 sections 115 students), Fall 2013 (64 students), Spring 2014 (62 students), Spring 2016 (46 students), Spring 2018 (49 students).
- **Instructor** for 3rd semester introductory calculus based undergraduate service course Physics 3 (PH2233) at Mississippi State University, Fall 2011 (37 students), Spring 2012 (85 students), Fall 2012 (43 students), Fall 2014 (55 students).
- **Instructor** for undergraduate/graduate Thermal Physics course (PH4413/6413) at Mississippi State University, Spring 2011 (11 students).
- **Instructor** for undergraduate/graduate classical Electricity and Magnetism course (PH4333/6333) at Mississippi State University, Spring 2009 (7 students) and Spring 2010 (5 students).
- **Instructor** for graduate classical Electricity and Magnetism course (PH8313) at Mississippi State University, Fall 2008 (8 students), Fall 2009 (5 students) and Fall 2010 (10 students).
- **Lab Coordinator** for Physics 3 (PH2233) at Mississippi State University, Fall 2011 (37 students), Fall 2012 (43 students), Fall 2014 (55 students).
- **Teaching Assistant**, for introductory physics classes, University of Washington, October 1995 - June 1997.

University Service Experience

- Served on the Constitution Committee for establishing *Phi Beta Kappa* chapter at Mississippi State University in 2018.
- Elected to the college Faculty Senate Committee, December 2017 - December 2019.
- Elected to the university Library Committee 2015-2017.
- Served in the Council of Advisors of the Society of Scholars honors program at Mississippi State University, since Fall 2008 till its dissolution in 2018 with the sheltering of the *Phi Beta Kappa* chapter at Mississippi State University.
- Elected and served on the university Teaching Evaluation Committee 2012-2014.
- Faculty Advisor to the graduate physics society in 2010, 2011.
- Chair of the Quantum Mechanics Placement Exam Committee 2018, 2019.
- Chair of the Colloquium Committee 2010, 2011, 2012.
- Chair of the Preliminary Exam Committee in Electricity and Magnetism 2009, 2010, 2011.
- Departmental Undergraduate Program Committee 2008, 2009, 2012, 2013.
- Recruitment Committee 2009, 2010.

- Spring Physics Competition committee at Mississippi State University 2009.
- Member of the Electricity and Magnetism Preliminary Exam Committee at Mississippi State University 2008, 2009, 2010, 2011, 2012, 2013.
- Member of the committee for undergraduate textbook selection for calculus based physics at Mississippi State University 2011.

Invited Colloquia/Talks

- “EFT power counting and Bayesian analysis”, Bayesian Inference in Subatomic Physics - Wallenberg Symposium, Gothenburg, Sweden, September 18, 2019.
- “Bayesian analysis of capture reactions”, Nuclear Structure at the Crossroads, Institute for Nuclear Theory, Seattle, July 3, 2019.
- “Nuclear Structure and Reactions using EFT”, JINPA, Oak Ridge National Lab., December 2018.
- “Nuclear Structure and Reactions in EFT”, FRIB Theory Alliance workshop on From Bound States to the Continuum, Michigan State Univ., E. Lansing, June 19, 2018.
- “Fate of the neutron-deuteron virtual state as an Efimov level”, Jefferson Laboratory Theory Center, March 21, 2018.
- “Low energy reactions in EFT”, Workshop on Towards Predictive Theories of Nuclear Reactions Across the Isotopic Chart, March 8, 2017, Institute for Nuclear Theory, Seattle.
- “Low-energy Reactions in EFT”, Program on Frontiers in Nuclear Physics, Kavli Institute for Theoretical Physics, UC Santa Barbara, October 28, 2016.
- “Nuclear Structure and Reactions using Lattice EFT”, Division of Nuclear Physics, American Physical Society, Vancouver, Canada, October 16, 2016.
- “Few-Body in EFT”, Workshop on Systematic Treatment of the Coulomb Interaction in Few-Body Systems: Part 2, Darmstadt, Germany, May 31, 2016.
- “Nuclear Reactions in lattice EFT”, Workshop on Nuclear Physics from Lattice QCD, Institute for Nuclear Theory, Seattle, May 20, 2016.
- “Coulomb Interactions in EFT”, Workshop on Systematic Treatment of the Coulomb Interaction in Few-Body Systems: Part 1, Darmstadt, Germany, January 12, 2016.
- “Nuclear Reactions in Lattice EFT”, Workshop on Weakly-Bound Exotic Nuclei, International Institute of Physics, Natal, Brazil, May 28, 2015
- “Nuclear Reactions in Lattice EFT”, Bethe Forum on Methods in lattice field theory, University of Bonn, Germany, March 24, 2015
- “Radiative Capture Reactions in Weakly Bound Systems”, Plenary speaker, XXXVI Brazilian Meeting on Nuclear Physics, Maresias, September 1-5, 2013.
- “Nuclear Structure and Reactions in Lattice Effective Field Theory”, Workshop on Nuclear Dynamics with Effective Field Theories, Ruhr-Universität Bochum, Bochum, Germany, July 2, 2013.
- “Radiative Capture Reactions in Lattice Effective Field Theory”, Workshop on Nuclear Reactions from Lattice QCD, Institute for Nuclear Theory, Seattle, March 12, 2013
- “Radiative Capture in Halo EFT”, Workshop on electroweak properties of light nuclei, Institute for Nuclear Theory, Seattle, November 8, 2012.

- “Radiative Neutron Capture on Lithium-7”, Triangle Nuclear Theory Colloquium at North Carolina State University, Raleigh, July 24, 2012.
- “Neutrino Emissivity in 3P_2 Superfluid Neutron Matter”, Workshop on Fermions from Cold Atoms to Neutron Stars, Institute for Nuclear Theory, Seattle, May 4, 2011.
- “Neutrino Emissivity in 3P_2 Superfluid Neutron Matter”, Workshop on Neutron Stars and Neutrinos, Arizona State University, Tempe, March 28-29, 2011.
- “Halo Effective Field Theory: neutron capture on lithium-7”, Workshop on Limits of Existence of Light Nuclei, European Center for Theoretical Studies (ECT*), Trento, Italy, October 25-30, 2010.
- “Viscosity and r -mode damping in stars with quark matter”, Workshop on Cold Atoms, QCD and Few-hadron Systems, Institute for Nuclear Theory, Seattle, May 6, 2010.
- “Viscosity and r -mode damping in stars with quark matter”, Workshop on Neutron Stars and Neutrinos, Arizona State University, Tempe, April 12-13, 2010.
- “Shear Viscosity and the Perfectness of Fluid”, Workshop on Effective Field Theories and the Many-Body Problem, Institute for Nuclear Theory, Seattle, May 14, 2009.
- “Shear Viscosity and the Perfectness of Fluid”, Mississippi State University, March 11, 2009.
- “Shear Viscosity and the Perfectness of Fluid”, Los Alamos National Laboratory, March 18, 2008.
- “From QCD to Nuclear Theory”, Mississippi State University, November 26, 2007.
- “Dilute Neutron Matter and Neutrino Interactions”, University of Maryland, College Park, April 20, 2007.
- “Dilute Neutron Matter and Neutrino Interactions”, Center for Nuclear Studies, George Washington University, D.C., April 19, 2007.
- “Effective Field Theories for Strong Interactions: From Atoms to Neutron Stars”, Jefferson Lab., Newport News, April 11, 2007.
- “From QCD to Nuclear Theory”, Hampton University, Hampton, April 10, 2007.
- “Dilute Neutron Matter and Neutrino Interactions”, TRIUMF, Vancouver, November 30, 2006.
- “Dilute Neutron Matter and Neutrino Interactions”, Ohio University, Athens, October 24, 2006.
- “Dilute Neutron Matter and Neutrino Interactions”, Ohio State University, Columbus, October 26, 2006.
- “Universality in a 2-component Fermi System at Finite Temperature”, North Carolina State University, Raleigh, May 16, 2006.
- “The Path to Nuclear Theory from QCD”, George Washington Univ., Washington, D.C., March 23, 2005.
- “The Path to Nuclear Theory from QCD”, University of Arizona, Tucson, February 11, 2005.
- “Nuclear Physics from lattice QCD: Finite lattice spacing and volume effects”, University of Arizona, Tucson, February 10, 2005
- “Nuclear Physics from lattice QCD: finite lattice spacing and volume effects”, University of Washington, September, 2004.
- “ χ PT for lattice QCD at $O(a^2)$ ”. Workshop on “Theories of Nuclear Forces and Nuclear Systems”, Institute for Nuclear Theory, Seattle, September 29 - December 5, 2003.
- “ $O(a)$ effects in Wilson lattice action”. Workshop on “Pushing the limits of QCD”, Benasque Center

for Science, Benasque, Spain, July 7-26, 2002.

- “ $np \rightarrow d\gamma$ for Big-Bang Nucleosynthesis”. Workshop on “Effective Field Theories and Effective Interactions”, Institute for Nuclear Theory, University of Washington, Seattle, June 26 - September 1, 2000.
- “Nucleon-Nucleon Scattering in Effective Field Theory”. Conference on “Nuclear Physics with Effective Field Theory: 1999”, Institute for Nuclear Theory, University of Washington, Seattle, February 25-26, 1999.

Contributed Talks

- “Nuclear structure and reactions using lattice effective field theory”, Institut de Physique Nucléaire, Orsay, France, July 18, 2018
- “Fate of the neutron-deuteron virtual state as an Efimov level”, Conference on Few-Body Problems in Physics, Caen, France, July 9, 2018
- “Scattering in lattice EFT”, Conference on Bound States and Resonances in Effective Field Theory and Lattice QCD Calculations, Benasque, Spain, July 23, 2014
- “Radiative Capture Reactions in Halo EFT”, Conference on Few-Body Problems in Physics, Fukuoka, Japan, August 23, 2012
- “Model-Independent Calculation of Radiative Neutron Capture on Lithium-7”, 2011 APS DNP Fall Meeting, East Lansing, October 27, 2011
- “Radiative Neutron Capture on Lithium-7”, 2011 APS April meeting, Anaheim, California, May 2, 2011.
- “Constraining phases of quark matter with studies of r -mode damping in neutron stars”, 2010 APS DNP Fall Meeting, Santa Fe, November 5, 2010.
- “Viscosity and r -mode damping in stars with quark matter”, 2008 APS DNP Fall meeting, Oakland, October 25, 2008.
- “Shear Viscosity and the Perfectness of Fluid”, 2008 APS March Meeting, New Orleans, March 13, 2008.
- “Hot Dilute Neutron Matter”, Fundamental Neutron Physics, Institute for Nuclear Theory, May 10, 2007.
- “Shear Viscosity and the Perfectness of Fluid”, North Carolina State University, October 18, 2007
- “Hot Dilute Neutron Matter and Neutrino Interactions”, 2007 APS April Meeting, Jacksonville, April 14, 2007.
- “Unitarity limit at high temperature”, University of Washington, Seattle, February 2005.
- “Few-Nucleon interactions from QCD”, Los Alamos National Lab., June 2005.
- “Nuclear Physics from lattice QCD: finite lattice spacing and volume effects”, Los Alamos National Lab., September, 2004.
- “Topics in dilute Fermi and Bose systems”, Los Alamos National Lab., March 9, 2004.
- “ χ PT on the lattice”, Los Alamos National Lab., April 23, 2003.
- “ χ PT for the discrete lattice”, Jefferson Lab., Center for Theoretical Physics at MIT, Brookhaven National Lab., University of Maryland, November, 2002.

- “Deuteron observables at TUNL in EFT”, Duke University, November, 2002.
- “ p - d scattering in EFT”, Benasque Center for Science, Benasque, Spain, July, 2002.
- “ $O(a)$ corrections in low-energy lattice simulations”, Lawrence Berkeley National Lab., Berkeley, December, 2002.
- “Coulomb effects in the three-nucleon system”, TRIUMF, Vancouver, June, 2001.
- “Nucleon Polarisability from Deuteron Compton Scattering”, TRIUMF, Vancouver, November, 2001.
- “ Nuclear Effective Field Theory and its applications”, TRIUMF, Vancouver, Feb, 2000; Argonne National Lab., March, 2000.
- “Effective Field Theory for Two-Nucleon Systems”, Department of Physics, University of Washington, Seattle, November 17, 1999.
- “Magnetic Monopoles as Gauge Particles: Montonen-Olive duality”, Particle Theory Journal Club, University of Washington, Seattle, 1999.
- “Decay of the False Vacuum”, Particle Theory Journal Club, University of Washington, Seattle, 1998.
- “Heavy Quark Effective Field Theory”, Particle Theory Journal Club, University of Washington, Seattle, 1997.

Publications

I have included citation records (generated in August 2019) from the publicly available databases: INSPIRE <http://inspirehep.net> maintained by SLAC at the Stanford University, German national lab DESY, Fermilab and CERN.

My citation average per paper is around 45, and h-index is 26. Since my promotion to my current Associate Professor rank, I had 16 peer-reviewed journal publications including an invited review article in *Int. J. Mod. Phys.*, an Editor's suggestion in *Phys. Rev. Lett.*, and a *Nature* publication.

1. **"Bayesian analysis of capture reactions ${}^3\text{He}(\alpha, \gamma){}^7\text{Be}$ and ${}^3\text{H}(\alpha, \gamma){}^7\text{Li}$ "**, P. Premarathna and G. Rupak, arXiv:1906:04143. Submitted for journal publication.
2. **"Universal behavior of p-wave proton-proton fusion near threshold"**, B. Acharya, L. Platter and G. Rupak, *Phys. Rev. C* **100**, 0210001 (2019)- Rapid Communications.
3. **"Fate of the neutron-deuteron virtual state as an Efimov level"**, G. Rupak, A. Vaghani, R. Higa, U. van Kolck, *Phys. Lett. B* **791**, 414 (2019). **Citations:** INSPIRE (5)
4. **"Radiative ${}^3\text{He}(\alpha, \gamma){}^7\text{Be}$ reaction in Halo Effective Field Theory"**, R. Higa, G. Rupak and A. Vaghani, *Eur. Phys. J. A* **54**, 89 (2018). **Citations:** INSPIRE (11)
5. **"Ab initio calculations of the isotopic dependence of nuclear clustering "**, S. Elhatisari, E. Epelbaum, H. Krebs, T. A. Lahde, D. Lee, N. Li, B. Lu, U.-G. Meißner, G. Rupak, *Phys. Rev. Lett.* **119**, 222505 (2017). **Citations:** INSPIRE (14)
6. **"Universal dimer-dimer scattering in lattice effective field theory"**, S. Elhatisari, K. Katterjohn, D. Lee, U.-G. Meißner and G. Rupak, *Phys. Lett. B* **768**, 337 (2017). **Citations:** INSPIRE (9)
7. **"Radiative reactions in halo effective field theory"**, G. Rupak, *Int. J. Mod. Phys. E* **25**, 1641004 (2016). Invited review article. **Citations:** INSPIRE (5)
8. **"Nucleon-deuteron scattering using the adiabatic projection method"**, S. Elhatisari, D. Lee, U.-G. Meißner and G. Rupak, *Eur. Phys. J. A* **52**, 174 (2016). **Citations:** INSPIRE (14)
9. **"Nuclear binding near a quantum phase transition"**, S. Elhatisari, N. Li, A. Rokash, J. M. Alarcón, D. Du, N. Klein, B. Lu, U.-G. Meißner, E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee and G. Rupak, *Phys. Rev. Lett.* **117**, 132501 (2016). Highlighted as Editor's Suggestion. **Citations:** INSPIRE (33)
10. **"Ab initio alpha-alpha scattering"**, S. Elhatisari, D. Lee, G. Rupak, E. Epelbaum, H. Krebs, T. A. Lähde, T. Luu and U.-G. Meißner, *Nature* **528**, 111 (2015). **Citations:** INSPIRE (63)
11. **"Nuclear Lattice Simulations using Symmetry-Sign Extrapolation"**, T. A. Lähde, T. Luu, D. Lee, U.-G. Meißner, E. Epelbaum, H. Krebs and G. Rupak, *Eur. Phys. J. A* **51**, 92 (2015). **Citations:** INSPIRE (21)
12. **"Proton-proton fusion in lattice effective field theory "**, G. Rupak and P. Ravi, *Phys. Lett. B* **741**, 301 (2014). **Citations:** INSPIRE (7)
13. **"Uncertainties of Euclidean Time Extrapolation in Lattice Effective Field Theory"**, T. A. Lähde, E. Epelbaum, H. Krebs, D. Lee, U.-G. Meißner, and G. Rupak, *J. Phys. G* **42**, 034012 (2015). **Citations:** INSPIRE (5)
14. **"Ab initio calculation of the spectrum and structure of ${}^{16}\text{O}$ "**, E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee, U.-G. Meißner and G. Rupak, *Phys. Rev. Lett.* **112**, 102501 (2014). **Citations:** INSPIRE (98)
15. **"Lattice Effective Field Theory for Medium-Mass Nuclei"**, T. A. Lähde, E. Epelbaum, H. Krebs, D. Lee, U.-G. Meißner and G. Rupak, *Phys. Lett. B* **732**, 110 (2014). **Citations:** INSPIRE (91)

16. “**Adiabatic projection method for scattering and reactions on the lattice**”, M. Pine, D. Lee, G. Rupak, *Eur. Phys. J. A* **49**, 151 (2013). **Citations:** INSPIRE (27)
17. “**Radiative capture reactions in lattice effective field theory**”, G. Rupak and D. Lee, *Phys. Rev. Lett.* **111**, 032502 (2013). **Citations:** INSPIRE (34)
18. “**The r-mode instability in strange stars with a crystalline crust**”, G. Rupak and P. Jaikumar, *Phys. Rev. C* **88**, 065801 (2013). **Citations:** INSPIRE (15)
19. “**Radiative neutron capture on carbon-14 in effective field theory**”, G. Rupak, L. Fernando and A. Vaghani, *Phys. Rev. C* **86**, 044608 (2012). **Citations:** INSPIRE (25)
20. “**Leading E1 and M1 contribution to radiative neutron capture on lithium-7**”, L. Fernando, R. Higa and G. Rupak, *Eur. Phys. J. A* **48**, 24 (2012). **Citations:** INSPIRE (28)
21. “**Model-Independent Calculation of Radiative Neutron Capture on Lithium-7**”, G. Rupak and R. Higa, *Phys. Rev. Lett.* **106**, 222501 (2011). **Citations:** INSPIRE (46)
22. “**Constraining phases of quark matter with studies of r-mode damping in neutron stars**”, G. Rupak and P. Jaikumar, *Phys. Rev. C* **82**, 055806 (2010). **Citations:** INSPIRE (14)
23. “**Density Functional Theory for non-relativistic Fermions in the Unitarity Limit**”, G. Rupak and T. Schäfer, *Nucl. Phys. A* **816**, 52 (2009). **Citations:** INSPIRE (24)
24. “**Viscous damping of r-mode oscillations in compact stars with quark matter**”, P. Jaikumar, G. Rupak and A. W. Steiner, *Phys. Rev. D* **78**, 123007 (2008). **Citations:** INSPIRE (40)
25. “**Effective Field Theory and Finite Density Systems**”, R. J. Furnstahl, G. Rupak and T. Schäfer, *Annu. Rev. Nucl. Part. Sci.* **58**, 1(2008). **Citations:** INSPIRE (33)
26. “**Shear viscosity of a superfluid Fermi gas in the unitarity limit**”, G. Rupak and T. Schäfer, *Phys. Rev. A* **76**, 053607 (2007). **Citations:** INSPIRE (79)
27. “**Polarized fermions in the unitarity limit**”, G. Rupak, T. Schäfer and A. Kryjevski, *Phys. Rev. A* **75**, 023606 (2007). **Citations:** INSPIRE (13)
28. “**Universality in a 2-component Fermi System at Finite Temperature**”, G. Rupak, *Phys. Rev. Lett.* **98**, 090403 (2007). **Citations:** INSPIRE (12)
29. “**Chiral Perturbation Theory for Staggered Sea Quarks and Ginsparg-Wilson Valance Quarks**”, O. Bär, C. Bernard, G. Rupak and N. Shores, *Phys. Rev. D* **72**, 054502 (2005). **Citations:** INSPIRE (106)
30. “**A nucleon in a tiny box**”, P. F. Bedaque, H. W. Griebhammer and G. Rupak, *Phys. Rev. D* **71**, 054015 (2005). **Citations:** INSPIRE (22)
31. “**Phase Structure of 2-Flavor Quark Matter: Heterogeneous Superconductors**”, S. Reddy and G. Rupak, *Phys. Rev. C* **71**, 025201 (2005). **Citations:** INSPIRE (74)
32. “**Chiral perturbation theory at $O(a^2)$ for lattice QCD**”, O. Bär, G. Rupak and N. Shores, *Phys. Rev. D* **70**, 034508 (2004). **Citations:** INSPIRE (179)
33. “**Phase Separation in Asymmetrical Fermion Superfluids**”, P. F. Bedaque, H. Caldas and G. Rupak, *Phys. Rev. Lett.* **91**, 247002 (2003). **Citations:** INSPIRE (169)
34. “**Goldstone Bosons in the 3P_2 Superfluid Phase of Neutron Matter and Neutrino Emission**”, P. F. Bedaque, G. Rupak and M. J. Savage, *Phys. Rev. C* **68**, 065802 (2003). **Citations:** INSPIRE (33)
35. “**Simulations with different lattice Dirac operators for valence and sea quarks**”, O. Bär, G. Rupak and N. Shores, *Phys. Rev. D* **67**, 114505 (2003). **Citations:** INSPIRE (104)

36. **“Quantum Corrections to Dilute Bose Liquids”**, P. F. Bedaque, A. Bulgac and G. Rupak, *Phys. Rev. A* **68**, 033606 (2003). **Citations:** INSPIRE (2)
37. **“Low Energy Expansion in the Three Body System to All Orders and the Triton Channel”**, P. F. Bedaque, G. Rupak, H. W. Grießhammer and H-W Hammer, *Nucl. Phys. A* **714**, 589 (2003). **Citations:** INSPIRE (131)
38. **“Dilute resonating gases and the third virial coefficient”**, P. F. Bedaque and G. Rupak, *Phys. Rev. B* **67**, 174513 (2003). **Citations:** INSPIRE (15)
39. **“Quartet S-wave p-d scattering in EFT”**, G. Rupak and X.W. Kong, *Nucl. Phys. A* **717**, 73 (2003). **Citations:** INSPIRE (40)
40. **“Chiral perturbation theory for the Wilson lattice action”**, G. Rupak and N. Shoresh, *Phys. Rev. D* **66**, 054503 (2002). **Citations:** INSPIRE (147)
41. **“Nucleon Polarisabilities from Compton Scattering on the Deuteron”**, H. W. Grießhammer and G. Rupak, *Phys. Lett. B* **529**, 57 (2002). **Citations:** INSPIRE (36)
42. **“Precision Calculation of $np \rightarrow d\gamma$ Cross Section for Big-Bang Nucleosynthesis”**, G. Rupak, *Nucl. Phys. A* **678**, 405 (2000). **Citations:** INSPIRE (113)
43. **“Improving the Convergence of NN Effective Field Theory”**, D. R. Phillips, G. Rupak and M. J. Savage, *Phys. Lett. B* **473**, 209 (2000). **Citations:** INSPIRE (97)
44. **“Isoscalar M1 and E2 Amplitudes in $np \rightarrow d\gamma$ ”**, J. W. Chen, G. Rupak and M. J. Savage, *Phys. Lett. B* **464**, 1 (1999). **Citations:** INSPIRE (59)
45. **“Nucleon-Nucleon Effective Field Theory Without Pions”**, J. W. Chen, G. Rupak and M. J. Savage, *Nucl. Phys. A* **653**, 368 (1999). **Citations:** INSPIRE (239)
46. **“Next-to-next-to-leading-order Calculation of Two-Nucleon Scattering in an Effective Field Theory”**, G. Rupak and N. Shoresh, *Phys. Rev. C* **60**, 054004 (1999). **Citations:** INSPIRE (26)
47. **“Non- $1/m_b^n$ Power Suppressed Contributions to Inclusive $B \rightarrow X_s l^+ l^-$ Decays”**, J. W. Chen, G. Rupak and M. J. Savage, *Phys. Lett. B* **410**, 285 (1997). **Citations:** INSPIRE (44)
48. **“Limits on Pseudoscalar Bosons from Rare Z Decays at LEP”**, G. Rupak and E. H. Simmons, *Phys. Lett. B* **362**, 155 (1995). **Citations:** INSPIRE (19)