

ADITH RAMAMURTI

Dated: December 7, 2019

CONTACT INFORMATION	Acoustics Division, Code 7165 U.S. Naval Research Laboratory 4555 Overlook Ave. SW Washington, DC 20375	adith [at] ramamurti.com adith.ramamurti [at] nrl.navy.mil
PROFESSIONAL EMPLOYMENT	Research Physicist Acoustics Division, U.S. Naval Research Laboratory, Washington, DC	Nov. 2018 - Present
EDUCATION	Ph.D., Physics (Nuclear Theory) Stony Brook University, Stony Brook, NY Advisor: Edward Shuryak Dissertation: Recent progress in understanding the role of monopoles in QCD	Aug. 2013 - Nov. 2018
	A.B., Mathematical Physics; A.B., Music Brown University, Providence, RI Honors: <i>magna cum laude</i> Advisor: Antal Jevicki Senior Thesis: Quantization of symmetric spaces	Sep. 2009 - May 2013
PUBLICATIONS AND PRE-PRINTS	A. Ramamurti and D. C. Calvo, <i>Multisector parabolic equation approach to compute acoustic scattering by noncanonically shaped impenetrable objects</i> , Physical Review E (accepted, in production), arXiv:1912.02406 [physics.comp-ph].	
	A. Ramamurti and E. Shuryak, <i>Extending the hydrodynamical description of heavy-ion collisions to the “outer edge” of the fireball</i> , arXiv:1811.03655 [hep-ph].	
	A. Ramamurti, E. Shuryak, and I. Zahed, <i>Are there monopoles in the quark-gluon plasma?</i> , Physical Review D 97 , 114028, arXiv:1802.10509 [hep-ph].	
	A. Ramamurti and E. Shuryak, <i>Chiral symmetry breaking and monopoles in gauge theories</i> , Physical Review D 100 , 016007, arXiv:1801.06922 [hep-ph].	
	A. Ramamurti and E. Shuryak, <i>Role of QCD monopoles in jet quenching</i> , Physical Review D 97 , 016010, arXiv:1708.04254 [hep-ph].	
	A. Ramamurti and E. Shuryak, <i>An effective model of QCD monopoles</i> , Nuclear Physics A 967 , 868-871, arXiv:1704.04467 [hep-ph].	
	A. Ramamurti and E. Shuryak, <i>Effective model of QCD magnetic monopoles from numerical study of one- and two-component Coulomb quantum Bose gases</i> , Physical Review D 95 , 076019, arXiv:1702.07723 [hep-ph].	
	I. Iatrakis, A. Ramamurti, and E. Shuryak, <i>Pomeron interactions from the Einstein-Hilbert action</i> , Physical Review D 94 , 045005, arXiv:1602.05014 [hep-ph].	
	I. Iatrakis, A. Ramamurti, and E. Shuryak, <i>Collective string interactions in AdS/QCD and high-multiplicity pA collisions</i> , Physical Review D 92 , 014011, arXiv:1503.04759	

[hep-ph].

TALKS AND
CONFERENCES

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| 178th Meeting of the Acoustical Society of America
Coronado, CA
<i>Application of a multi-sector parabolic equation approach to compute
acoustic scattering by non-canonically shaped impenetrable objects</i> | Dec. 2019 |
| Gauge Topology III: From Lattice to Colliders
European Center for Theoretical Physics, Trento, IT
<i>Recent progress in understanding the role of monopoles in QCD</i> | May 2018 |
| JETSCAPE Winter School and Workshop
Lawrence Berkeley National Lab, Berkeley, CA
<i>The role of QCD monopoles in jet quenching</i> | Jan. 2018 |
| Stony Brook Nuclear Theory Seminar
Stony Brook University, Stony Brook, NY
<i>The role of QCD monopoles in jet quenching</i> | Nov. 2017 |
| XXVIth International Conference on Ultrarelativistic Nucleus-
Nucleus Collisions (Quark Matter 2017)
Chicago, IL
<i>An effective model of QCD monopoles</i> | Feb. 2017 |
| Gauge Field Topology Workshop
Simons Center for Geometry and Physics, Stony Brook, NY
<i>QCD strings and their interactions from the holographic perspective</i> | Aug. 2015 |

HONORS AND
AWARDS

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| Jerome and Isabella Karle Fellowship
U.S. Naval Research Laboratory, Washington, DC | Nov. 2018 - Nov. 2020 |
| Mildred G. Widgoff Prize for Excellence in Thesis Preparation
Physics Department, Brown University, Providence, RI | May 2013 |

OTHER
EMPLOYMENT

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| Graduate Research Assistant
Dept. of Physics and Astronomy, Stony Brook University
Stony Brook, NY | Jan. 2015 - Nov. 2018
May 2015 - Aug. 2015
Mar. 2014 - Aug. 2014 |
| Graduate Teaching Assistant
Dept. of Physics and Astronomy, Stony Brook University
Stony Brook, NY | Aug. 2015 - Dec. 2015
Aug. 2014 - May 2015 |
| Undergraduate Research Assistant
Physics Department, Brown University
Providence, RI | May 2012 - Aug. 2012
May 2011 - Aug. 2011 |
| Physical Science Aid
Acoustics Division, U.S. Naval Research Laboratory
Washington, DC | Dec. 2010 - Jan. 2011
Jun. 2008 - Aug. 2008
Jun. 2007 - Aug. 2007 |

SKILLS

- Programming Languages and Software
- Expert: C++, Python, Unix shell (bash, tcsh), Mathematica, L^AT_EX
 - Intermediate: Fortran, Java, MATLAB, COMSOL

Programming Techniques

- Expert: Parallelization (MPI, openMP), Monte Carlo methods
- Intermediate: Machine learning, neural networks