
JAMES L. NAGLE

email: Jamie.Nagle@Colorado.Edu

EXPERIENCE AND EDUCATION

UNIVERSITY OF COLORADO AT BOULDER

Professor of Physics

2009-

Associate Professor of Physics

2005-2008

Assistant Professor of Physics

2002-2005

PHENIX Experiment at the Relativistic Heavy Ion Collider

- Leadership role in studies of Quark-Gluon Plasma and probes in small systems (p/d/3He+A)
- Hardware leadership in high speed digital electronics and data acquisition

Phenomenology/Theory

- Modeling small QGP dynamics, charm flow results, novel statistical analysis methods
- Population genetics for cloning organisms

Awards and Positions

- Co-Spokesperson for the PHENIX Experiment and sPHENIX Project (2012- 2015)
- Deputy Spokesperson for the PHENIX Experiment (2009-2012)
- Trigger Coordinator for the PHENIX Experiment (2002-2010)
- Principal Investigator on Division of Nuclear Physics, DOE base grant (2003-present)
- University of Colorado, Boulder Faculty Assembly, Excellence in Research Award (2016)
- Elected Fellow of the American Physical Society
- Recipient of an Alfred P. Sloan Research Fellowship
- Outstanding Junior Investigator Grant Award in the Division of Nuclear Physics, DOE
- Member of Nuclear Science Advisory Committee (2012-2016)
- Member of the Program Advisory Committee at Brookhaven National Laboratory (2003-2009)
- Member of the Division of Nuclear Physics Program Committee (2007-2009)

NEILS BOHR INSTITUTE

Discovery Center Fellow

2011

Sabbatical Position at the Niels Bohr Institute supported by the Discovery Center and Nordea Bank

- ALICE Experiment analysis of higher flow harmonics and jet correlations

COLUMBIA UNIVERSITY

Assistant Professor of Physics

1998-2002

Post-Doctoral Research Scientist

1997-1998

PHENIX Experiment at the Relativistic Heavy Ion Collider

YALE UNIVERSITY

M.S., M. Phil., Ph.D. in Physics

1991-1997

Experiment 864 and Experiment 878 at the Brookhaven AGS facility

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Bachelor of Science in Physics

1988-1991

Graduated Phi Beta Kappa with 5.0/5.0 GPA and minor in Political Science

James L. Nagle

Previous Sabbatical

Spring 2011 – six-month sabbatical spent at the Neils Bohr Institute in Copenhagen, Denmark with support from the Nordea Bank Foundation.

Support and Sponsors (2003-present at the University of Colorado Boulder)

Department of Energy, Office of Science, Nuclear Physics grant
2004-present, Nagle as sole Principal Investigator and sole Faculty Member
Total Awarded Amount = \$4,455,000 (2003-2018) and \$1,170,000 (2018-2021)

Nordea Bank Foundation
2011, Nordea Visiting Scholar in Copenhagen, Denmark
Total Awarded Amount = Nordea housing for 6 months (no specific dollar value given).

Department of Energy, Office of Science, Outstanding Junior Investigator grant
2002-2005, Nagle as sole Principal Investigator and sole Faculty Member
Total Awarded Amount = \$50,000 (2003-2004)

Alfred P. Sloan Foundation
2002-2005, Nagle as Sloan Fellow
Total Awarded Amount = \$40,000

Courses Taught in the Last Four Years

Spring 18 (PHYS 1020, Physics of Everyday Life II)
Fall 17 (PHYS 2020, General Physics II – Electricity, Magnetism, Optics)
Spring 17 (PHYS/ENVS 3070, Energy and the Environment)
Fall 16 (PHYS 2020, General Physics II, Electricity, Magnetism, Optics)
Spring 16 (PHYS/ENVS 3070, Energy and the Environment)
Fall 15 (PHYS 4610/20/30, Physics Honors)
Spring 15 – teaching buyout as Co-Spokesperson for the PHENIX/sPHENIX Collaboration
Fall 14 (PHYS 2020, General Physics II, Electricity, Magnetism, Optics)

Faculty Course Questionnaire Results: Instructor Overall > 5.3 in all courses.

Selected Publications

J. D. Orjeula Koop, R. Belmont, P. Yin, J.L. Nagle, “Exploring the Beam-Energy Dependence of Flow-Like Signatures in Small System d+Au Collisions”, Phys. Rev. C 93, 044910 (2016) – 11 citations

J.L. Nagle et al., “Exploiting Intrinsic Triangular Geometry in Relativistic $^3\text{He}+\text{Au}$ Collisions to Disentangle Medium Properties”, Phys. Rev. Letter. 113, 11, 112301 (2014) – 62 citations

J.D. Orjeula Koop, A. Adare, D. McGlinchey, J.L. Nagle, Phys. Rev. C 92, 054903 (2015),
“Azimuthal Anisotropy Relative to the Participant Plane from a Multiphase Transport Model
in Central p+Au, d+Au, 3He+Au Collisions at 200 GeV”, Phys. Rev. C 92, 5, 054903 (2015)
– 25 citations

A. Adare et al. (including J.L. Nagle), “Measurements of Elliptic and Triangular Flow in High-
Multiplicity 3He+Au Collisions at 200 GeV”, Phys. Rev. Letter. 115, 14, 14301 (2015) – 76
citations

A. Adare et al. (including J.L. Nagle), “Quadrupole Anisotropy in Dihadron Azimuthal
Correlations in Central d+Au Collisions at 200 GeV”, Phys. Rev. Lett. 111, 21, 212301
(2013) – 213 citations

B. Muller and J.L. Nagle, "Results from the Relativistic Heavy Ion Collider", Ann. Rev. Nucl.
Part. Sci. 56: 93-135, 2006. [nucl-th/0602029]. – 183 citations

K. Adcox et al. (including J.L. Nagle), “Formation of Dense Partonic Matter in Relativistic
Nucleus-Nucleus Collisions at RHIC: Experimental Evaluation by the PHENIX
Collaboration”, Nucl. Phys. A757, 184-283 (2005) – 2225 citations.

Nuclear Physics Long Range Plan and sPHENIX Upgrade Proposal

A. Aprahamian et al. (including J.L. Nagle), “Reaching for the Horizon: The 2015 Long
Range Plan for Nuclear Science”, October 2015, 165 pages,
science.energy.gov/~media/np/nsac/pdf/2015LRP/2015_LRPNS_091815.pdf

C. Aidala et al. (including J.L. Nagle), “sPHENIX: An Upgrade Concept from the PHENIX
Collaboration”, arXiv:1207.6378 – 44 citations

Paper on Genetics and Clonal Interference

C.A. Fogle, J.L. Nagle, M.M. Desai, "Clonal Interference, Multiple Mutations and Adaptation
in Large Asexual Populations", Genetics, Vol. 180, 2163 (2008). – 68 citations

Selected Talks

Links to all talk presentations (over 118 talks to date) are available at
<http://www.phenix.bnl.gov/WWW/publish/nagle/Presentations/>

Invited Physics Department Colloquia:

Argonne National Laboratory, Colorado State University, Columbia University, Fermi
National Accelerator Laboratory, Lund University (Sweden), Neils Bohr Institute (Denmark),
New Mexico State University, Wayne State University, State University of New York, Stony
Brook, University of California, Berkeley, University of California, Riverside, University of
Frankfurt (Germany), University of Houston, University of Illinois, Chicago, University of
Kentucky, University of New Mexico, University of Ohio, University of Virginia, University of
Washington, Vanderbilt University, Yale University