

Jessica C. Kintner

*Department of Physics and Astronomy
Saint Mary's College of California
Moraga, CA 94575
(925) 631-4416
FAX: (925) 631-6282*

*160 Via Joaquin
Moraga, CA 94556
(925) 247-0564
Email: jkintner@stmarys-ca.edu
Web: <http://physics.stmarys-ca.edu/jkintner/>*

Education

- PhD** 1995, Experimental Nuclear Physics, University of California, Davis
 Dissertation: Squeeze-out and Flow of Pions from 1.15 GeV/nucleon Au + Au.
 Advisor: Daniel Cebra
- MS** 1992, Physics, University of California, Davis
- BA** 1988, *Magna Cum Laude*, Physics and Mathematics, DePauw University

Grants and Awards

- 2015-18 Director of the Clare Boothe Luce Scholars program at Saint Mary's.
 The program awards \$300,000 in scholarships to women in science majors at SMC over three years.
- 1998-2001 NSF/RUI Grant PHY-9804672 \$45,388
- 1988 Phi Beta Kappa

Teaching and Research Experience

Full Professor , Saint Mary's College, Moraga, CA	Fall 2005 - present
Associate Professor , Saint Mary's College, Moraga, CA	Fall 2000 - Spring 2005
Assistant Professor , Saint Mary's College, Moraga, CA	Fall 96 - Spring 2000
Visiting Assistant Professor , Lawrence University, Appleton, WI	Fall 95 - Spring 96
Physics Instructor , Los Rios Community College District, Sacramento, CA	1992-1994
AWU Fellow , Lawrence Berkeley National Laboratory (LBNL) and UC Davis	1994-1995

Courses Taught: Introductory physics for majors (Physics 1/2, 3/4); General physics for health science majors (Physics 10/10L, 11/11L); Revolutions in Science (for non-science majors) (40/41); Modern physics (60); Analytical Mechanics (105); Electricity and Magnetism (110); Quantum Mechanics (125); Advanced Modern Laboratory (180); Electronics and Instrumentation (181); Optics (140); Particle Physics (140); Heavy Ion Physics (140); Collegiate Seminar (all four semesters).

Service to Saint Mary's College

- Department Chair of Physics and Astronomy 2003-06, Fall 2010-present
- Academic Senate, School of Science Rep. 1998-2001, 2011-13, 2015-18
 Vice-Chair 2001-02
- Faculty Welfare Committee, Senate Rep. 2012-13
- College Rank and Tenure Committee member 2005-08
- Collegiate Seminar Governing Board member 2005-06, Fall 2007
- Cohort Advisor 2003-04
- FYAC leader 2011-12, 2014-15, 2015-16
- Technology Advisory Group (TAC), Faculty Rep Fall 2003-Spring 2006

• Faculty Technology Advisory Group (FTAG), Faculty Rep Chair	2001-04 2001-02
• Faculty Center for Advancement of Technology (FCAT), (formerly FTAG)	Fall 2004-Spring 2006
• Technology Coordinating Committee (TCC), Faculty Rep. Co-chair	1999/2000-2002/03 2000-02
• Faculty Development Fund Committee	Fall 2001
• School of Science Steering Committee (SCSC)	1998-2000

Professional Memberships

- American Association of Physics Teachers (AAPT)
- American Physical Society (APS)
- Division of Nuclear Physics (DNP)
- Project Kaleidoscope (PKAL) Faculty 21

Publications

1. *Charged Pion Production in 2 to 8A GeV Central Au + Au Collisions*
J.L. Klay and the E895 Collaboration, *Physical Review C* **68**, 054905, (2003).
2. *Near-Threshold Production of the Multistrange Xi- Hyperon*,
P. Chung and the E895 Collaboration, *Physical Review Letters* **91**, 203301, (2003).
3. *Comparison of Source Images for Protons, Pions, and Lambda Hyperons in 6A GeV Au + Au Collisions*
P. Chung and the E895 Collaboration, *Physical Review Letters* **91**, 162301, (2003).
4. *Constructing the phase diagram of finite neutral nuclear matter*,
J.B. Elliot and the EOS Collaboration, *Physical Review C* **67**, 024609, (2003).
5. *Centrality and Momentum-selected Elliptic Flow: Tighter Constraint for the Nuclear Equation of State*,
P. Chung and the E895 Collaboration, *Physical Review C* **66**, 021901, (2002).
6. *Longitudinal Flow from 2 to 8A GeV Au + Au Collisions at the Brookhaven AGS*,
J.L. Klay and the E895 Collaboration, *Physical Review Letters* **88**, 102301, (2002).
7. *Comparison of 1A GeV 197Au + C data with thermodynamics: The nature of the phase transition in nuclear multifragmentation* ,
R.P. Scharenberg and the EOS Collaboration, *Physical Review C* **64**, 054602 (2001).
8. *Thermal phase transition in nuclear multifragmentation: The role of Coulomb energy and finite size*,
B.K. Srivastava and the EOS Collaboration, *Physical Review C* **64**, 041605 (2001).
9. *Model-independent Source Imaging Using Two-pion Correlations in 2 to 8A GeV Au + Au Collisions*,
S.Y. Panitkin and the E895 Collaboration, *Physical Review Letters* **87**, 112304, (2001).

10. *Directed Flow of Lambda Hyperons in 2 - 6A GeV Au + Au Collisions*,
P. Chung and the E895 Collaboration, *Physical Review Letters* **86**, 2533, (2001).
11. *Azimuthal Dependence of Pion Interferometry at the AGS*,
M.A. Lisa and the E895 Collaboration, *Physics Letters* **B496** 1, (2000).
12. *Statistical signatures of critical behavior in small systems*
J.B. Elliot and the EOS Collaboration, *Physical Review* **C62**, 064603, (2000).
13. *Nuclear Multifragmentation, Percolation, and the Fisher Droplet Model: Common Features of Reducibility and Thermal Scaling*
J.B. Elliot and the EOS Collaboration, *Physical Review Letters* **85**, 1194, (2000).
14. *Two-stage multifragmentation of 1A GeV Kr, La, and Au*
J.A. Hauger and the EOS Collaboration, *Physical Review* **C62**, 024616, (2000).
15. *Antiflow of K_s^0 Mesons in 6A Au + Au Collisions*
P. Chung and the E895 Collaboration, *Physical Review Letters* **85**, 940, (2000).
16. *Sideward Flow in Au + Au Collisions Between 2A GeV and 8A GeV*
H. Liu and the E895 Collaboration, *Physical Review Letters* **84**, 5488, (2000).
17. *Bombarding Energy Dependence of π^- Interferometry at the Brookhaven AGS*
M.A. Lisa and the E895 Collaboration, *Physical Review Letters* **84**, 2798, (2000).
18. *Universality in fragment inclusive yields from Au + Au Collisions*
A. Insolia and the EOS Collaboration, *Physical Review* **C61**, 044902, (2000).
19. *Comparison of the 1A GeV $^{197}\text{Au} + C$ interaction with first-stage transport codes*
B.K. Srivastava and the EOS Collaboration, *Physical Review* **C60**, 064606 (1999).
20. *Elliptic Flow: Transition from Out-of-Plane to In-Plane Emission in Au + Au Collisions*
C. Pinkenburg and the E895 Collaboration, *Physical Review Letters* **83**, 1295 (1999).
21. *Lambda hyperons in 2 A GeV Ni + Cu collisions*
M. Justice and the EOS Collaboration, *Physics Letters* **B440**, 12, 1998.
22. *Dynamics of Radical Collective Energy in near Central Collisions for 1-A-GeV Au+C*
J. Lauret and the EOS Collaboration, *Physical Review* **C57**, 1051, 1998.
23. *Multifragmentation of the Remnant Produced in the Reaction of 1-A-GeV Gold With Carbon*
J.A. Hauger and the EOS Collaboration, *Physical Review* **C57**, 764, 1998.
24. *Delta Resonance Production in $^{58}\text{Ni} + \text{Cu}$ Collisions at $E = 1.97\text{-A-GeV}$*
E.L. Hjort and the EOS Collaboration, *Physical Review Letters* **79**, 4345, 1997.
25. *Pion Flow and Anti-flow in the System 1.15 GeV/nucleon Au + Au*
J.C. Kintner and the EOS Collaboration, *Physical Review Letters* **78** 4165, 1997.
26. *The Energy Dependence of Flow in Ni Induced Collisions from 400A to 1970A MeV*
J.L. Chance and the EOS Collaboration, *Physical Review Letters* **78**, 2535, 1997.

27. *Dynamics of Multifragmentation of 1A GeV Gold on Carbon*
 J.A. Hauger and the EOS Collaboration, *Physical Review Letters* **77**, 235, 1996.
28. *In-plane Retardation of Collective Expansion in Heavy Ion Collisions*
 S. Wang and the EOS Collaboration, *Physical Review Letters* **76**, 3911, 1996.
29. *Individual Fragment yields and the determination of the critical exponent σ*
 J.B. Elliott and the EOS Collaboration, *Physics Letters* **B381**, 35, 1996.
30. *Radial Flow in Au + Au Collisions at E=(0.25-1.15)A GeV*
 M.A. Lisa and the EOS Collaboration, *Physical Review Letters* **75**(14), 2662, 1995.
31. *Fragment Flow in Au + Au Collisions*
 M.D. Partlan and the EOS Collaboration, *Physical Review Letters*, **75**(11), 2100, 1995.
32. *Light Fragment Production and Power Law Behavior in Au + Au Collisions*
 S. Wang and the EOS Collaboration *Physical Review Letters* **74**(14), 2646, (1995).
33. *Determination of Critical Exponents from the Multifragmentation of Gold Nuclei*
 M.L. Gilkes and the EOS Collaboration, *Physical Review Letters* **73**, 1590, (1994).
34. *A Compact System with Live Converter for Neutron Spectrum Measurements*
 J.H. Osborne, J.L. Romero, F.P. Brady, E.L. Hjort, W.P. Caskey, **J.C. Kintner**, D.R. Mayo, D.S. Sorenson, J.L. Ullmann. *Nuclear Instruments and Methods*, **A345**, 308.

The E895 Collaboration:

N.N. Ajitanand, J. Alexander, M. Anderson, D. Best, F.P. Brady, T. Case, W. Caskey, D.A. Cebra, J.L. Chance, P. Chung, B. Cole, K. Crowe, A. Das, J.E. Draper, M.L. Gilkes, S. Gushue, M. Heffner, A.S. Hirsch, E.L. Hjort, L. Huo, M. Justice, M. Kaplan, D. Keane, **J.C. Kintner**, J. Klay, D. Krfcheck, R. Lace, H. Liu, Y.M. Liu, R. McGrath, Z. Milosevich, G. Odyniec, D.L. Olson, S.Y. Panitkin, C. Pinkenburg, N.T. Porile, G. Rai, H.G. Ritter, J.L. Romero, R. Scharenberg, L.S. Schroeder, B.K. Srivastava, N.T.B. Stone, T.J.M. Symons, S. Wang, J. Whitfield, T. Wienold, R. Witt, L. Wood, X. Yang, W. Zhang, Y. Zhang,

The EOS Collaboration:

S. Albergo, F. Bieser, F.P. Brady, Z. Caccia, D. Cebra, A.D. Chacon, J. Chance, Y. Choi, S. Costa, J.B. Elliott, M.L. Gilkes, J.A. Hauger, A.S. Hirsch, E.L. Hjort, A. Insolia, M. Justice, D. Keane, **J. Kintner**, M.A. Lisa, H.S. Matis, M. McMahan, C. McParland, D.L. Olson, M.D. Partlan, G. Peilert, N.T. Porile, R. Potenza, G. Rai, J. Rasmussen, H.G. Ritter, J. Romanski, J.L. Romero, G.V. Russo, R.P. Scharenberg, A. Scott, Y. Shao, B.K. Srivastava, T.J.M. Symons, M.L. Tincknell, C. Tuvé, S. Wang, P.G. Warren, H.H. Wieman, and K. Wolf.

Conference Proceedings

1. *The E895 pion correlation analysis: A Status report,*
 M.A. Lisa for the E895 Collaboration, Presented at the 20th Winter Workshop on Nuclear Dynamics, Trelawny Beach, Jamaica, 15-20 Mar 2004

2. *Neutral Strange Particle Dynamics in Au + Au Collisions at AGS Energies*,
P. Chung for the E895 Collaboration, Proc. of Strangeness 2001 (6th International Conference on Strangeness in Quark Matter), September 2001, Frankfurt, Germany, J. Phys. G 28, 1567 (July 2002).
3. *Laying the Groundwork at the AGS: Recent Results from Experiment E895*,
M.A. Lisa for the E895 Collaboration, Proc. of Quark Matter 2001, Stony Brook, New York, January 2001. Nucl. Phys. A 698, 185c (2002).
4. *Production and Collective Behavior of Strange Particles in Au + Au Collisions at 2-8A GeV*,
C. Pinkenburg for the E895 Collaboration, Proc. of Quark Matter 2001, Stony Brook, New York, January 2001. Nucl. Phys. A 698, 495c (2002).
5. *Lambda Flow and Lambda-Proton Correlations in Au + Au Collisions at AGS Energies*,
P Chung for the E895 Collaboration, Proc. of Strangeness 2000 (5th International Conference on Strangeness in Quark Matter), July 2000, Berkeley, California, J. Phys. G 27, 293 (2001).
6. *Flow and HBT Measurements in the E895 Experiment*,
M.A. Lisa, E895 Collaboration, Proc. of CIPANP 2000, Quebec City, Canada, May 2000 (AIP Press, 2001).
7. *Pion Imaging at the AGS*,
Sergei Y. Panitkin for the E895 Collaboration, Proc. of Bologna 2000, Structure of the Nucleus at the Dawn of the Century, Bologna, Italy, May 29 - June 3, 2000.
8. *Nuclear Imaging: Studying Freeze-out with Proton and Pion Correlations*,
Sergei Y. Panitkin for the E895 Collaboration, Proc. of 3rd Catania Relativistic Ion Studies (CRIS 2000) Acicastello, Italy, May 2000, Nucl. Phys. A681, 190c (2001).
9. *Hadronic Flow in 2-8A GeV Au + Au Collisions*,
Gulshan Rai and the E895 Collaboration, Proc. of 3rd Catania Relativistic Ion Studies (CRIS 2000) Acicastello, Italy, May 2000 Nucl. Phys. A681, 181c (2001).
10. *Longitudinal Flow in 2, 4, 6 and 8A GeV Au+Au Collisions at the AGS*, J. Klay et al., (E895 collaboration),
RHIC 2000 (5th RHIC-INT Workshop & 16th Winter Workshop on Nuclear Dynamics), Park City, Utah, March 2000, online proceedings edited by Wolfgang Bauer, (<http://theo08.nscl.msu.edu/RHIC2k/proceedings.htm>)
11. *Nuclear Imaging: Studying Freeze-out at AGS*,
S. Panitkin et al., (E895 collaboration), RHIC 2000 (5th RHIC-INT Workshop & 16th Winter Workshop on Nuclear Dynamics), Park City, Utah, March 2000, online proceedings edited by Wolfgang Bauer, (<http://theo08.nscl.msu.edu/RHIC2k/proceedings.htm>)
12. *Probing Baryon Freeze-out Density at the AGS with Proton Correlations*,
S.Y. Panitkin, et al., (E895 Collaboration), Proc. of XXIX International Symposium on Multiparticle Dynamics (ISMD99), Brown U., Providence, Rhode Island, August 1999 (World Scientific, Singapore, in press).

13. *Beam Energy Evolution of HBT Systematics at the AGS*,
M.A. Lisa and the E895 Collaboration, Proc. of Quark Matter '99, Torino, Italy, May 1999, eds. L. Riccati, M. Masera and E. Vercellin, Nucl. Phys. A661, 444c (1999).
14. *Results from the Experiment E895 at the BNL AGS*,
G. Rai and the E895 Collaboration, Proc. of Quark Matter '99, Torino, Italy, May 1999, eds. L. Riccati, M. Masera and E. Vercellin, Nucl. Phys. A661, 162c (1999).
15. *Strangeness in Au + Au Collisions Between 1 and 10A GeV*,
D. Best and the E895 Collaboration, Proc. of the Relativistic Heavy Ion Minisymposium at the Centennial Meeting of the American Physical Society, Atlanta, Georgia, March 1999, ed. R. Seto (World Scientific, Singapore, 1999), p. 286.
16. *Dynamics of the Radial Flow of Strange Particles*,
R. Lacey and the E895 Collaboration, Proc. of the Relativistic Heavy Ion Minisymposium at the Centennial Meeting of the American Physical Society, Atlanta, Georgia, March 1999, ed. R. Seto (World Scientific, Singapore, 1999), p. 88.
17. *Composite Fragment Production in Au+Au Collisions Between 2 A GeV and 8 A GeV*,
R. Witt and the E895 Collaboration, Proc. of the Relativistic Heavy Ion Minisymposium at the Centennial Meeting of the American Physical Society, Atlanta, Georgia, March 1999, ed. R. Seto (World Scientific, Singapore, 1999), p. 297.
18. *The Bombarding Energy Dependence of pi- Interferometry at the AGS*,
M.A. Lisa for the E895 Collaboration, Proc. of 15th Winter Workshop on Nuclear Dynamics, Park City, Utah, January 1999, eds. W. Bauer and G.D. Westfall (Kluwer Academic Press, 1999), p. 147.
19. *Beam Energy Dependence of Two-Proton Correlations at the AGS*,
S.Y. Panitkin and the E895 Collaboration, Proc. of 15th Winter Workshop on Nuclear Dynamics, Park City, Utah, January 1999, eds. W. Bauer and G.D. Westfall (Kluwer Academic Press, 1999), p. 271.
20. *An HBT Excitation Function at the AGS*,
M.A. Lisa for the E895 Collaboration, Proc. of 2nd Catania Relativistic Ion Studies (CRIS '98) Acicastello, Italy, June 1998, eds. S. Costa, S. Albergo, A. Insolia, and C. Tuve (World Scientific, Singapore, 1999), p. 357.
21. *Neutral Strange Particle Production and Flow at AGS Energies*,
P. Chung and the E895 Collaboration, Proc. of International Symposium on Strangeness in Quark Matter, Padua, Italy, 1998, ed. M. Morando, J. Phys. G **25**, 255 (1999).
22. *The E895 pi- Correlation Analysis – A Status Report*,
M.A. Lisa for the E895 Collaboration, Advances in Nuclear Dynamics 4 (Proc. of 14th Winter Workshop on Nuclear Dynamics, Snowbird, Utah, February 1998) eds. W. Bauer and H.-G. Ritter (Plenum, New York, 1998), p. 183.
23. *Collective Flow in Au + Au Collisions Between 2-8A GeV at the AGS*,
H. Liu, *et al.*, (E895 Collaboration), Proc. of Quark Matter '97, Tsukuba, Japan, December 1997, eds. T. Hatsuda, Y. Miake, S. Nagamiya, and K. Yagi, Nucl. Phys. **A638**, 451c (1998).

24. *Collective Flow and Particle Spectra in Relativistic Heavy-Ion Collisions*,
H. Liu for the E895 Collaboration, Proc. of Sixth Int. Conf. on Nucleus-Nucleus
Collisions, Gatlinburg, Tennessee, June 1997, eds. M. Thoennessen, F. Bertrand, J.
Garrett, and C. Gelbke, Nucl. Phys. A630, 549c (1998).
25. *First Results on Lambda Production Between 2 and 8 A GeV from E895*,
D. Best for the E895 Collaboration, Proc. of International Symposium on Strangeness
in Quark Matter, Santorini, Greece, April 1997, J. Phys. G 23, 1873 (1997).
26. *Nucleon-Induced Secondaries: A Review and Future Experimental Developments*,
J.L. Romero, Henry H.K. Tang, D.J. Morrissey, M. Fauerback, R. Pfaff, C.F. Powell,
B.M. Sherrill, F.P. Brady, D.A. Cebra, J. Chance, **J.C. Kintner**, J.H. Osborne,
American Institute of Physics Conference Proceedings, CP392, 655, April 1997.
27. *Collective Effects of Pions at 1.15 GeV/nucleon Au+Au*
D. Cebra for the EOS Collaboration, Proceedings of the 1st Catania Relativistic Ion
Studies, Acicastello, Italy, May 27-31, 1996.
28. *The Hanbury-Brown-Twiss Effect at Bevalac Energies*
A. Dean Chacon for the EOS Collaboration, Proceedings of the 1st Catania Relativistic Ion
Studies, Acicastello, Italy, May 27-31, 1996.
29. *The Role of Thermally Driven Expansion in 1 AGeV Au+C Reactions*
R. Lacey for the EOS Collaboration, Proceedings of the 1st Catania Relativistic Ion
Studies, Acicastello, Italy, May 27-31, 1996.
30. *Collective Flow in Heavy Ion Collisions*
D. Keane for the EOS Collaboration, Proceedings of the 1st Catania Relativistic Ion
Studies, Acicastello, Italy, May 27-31, 1996.
31. *Nuclear Multifragmentation: Comparison between EOS Data of Au+C at 1 GeV/Nucleon
and a Statistical Fragmentation Model*
B.K. Srivastava for the EOS Collaboration, Proceedings of the 1st Catania Relativistic
Ion Studies, Acicastello, Italy, May 27-31, 1996.
32. *Critical Exponents and the Scaling Function in Nuclear Multifragmentation of 1 AGeV
Au+C*
M.L. Tincknell for the EOS Collaboration, Proceedings of the 1st Catania Relativistic
Ion Studies, Acicastello, Italy, May 27-31, 1996.
33. *Excitation Energy, Temperature, and Density in the Multifragmentation of Gold Nuclei*
J.A. Hauger for the EOS Collaboration, Proceedings of the 1st Catania Relativistic
Ion Studies, Acicastello, Italy, May 27-31, 1996.
34. *Pion Squeeze-Out and Flow at 1.15 GeV/nucleon Au+Au*
D. Cebra for the EOS Collaboration, Proceedings of the 12th Winter Workshop on
Nuclear Dynamics, Snowbird, UT, 3-10 February, 1996.
35. *The Scaling Function of Nuclear Matter*
A.S. Hirsch for the EOS Collaboration, Proceedings of the 12th Winter Workshop on
Nuclear Dynamics, Snowbird, UT, 3-10 February, 1996.

36. *Excitation Energy and Temperature in the Multifragmentation of 1 GeV/nucleon Au+C*
M. Tincknell for the EOS Collaboration, Proceedings of the 12th Winter Workshop on Nuclear Dynamics, Snowbird, UT, 3-10 February, 1996.
37. *Strange Particle Measurements from the EOS TPC*
M. Justice for the EOS Collaboration, Proceedings of the International Winter Meeting on Nuclear Physics, Bormio, Italy, Jan 23-28, 1995.

Presentations and Panels

1. *Using Doceri to create short lecture/movies*

Jessica Kintner, presented to the faculty in an event sponsored by FTG, Apr 7, 2011, and May 25, 2012, and to the faculty of the School of Science, May 22, 2013.

2. *Teaching and Research Beyond Berkeley*

Jessica Kintner, Panel presenter and participant, presented as part of the Berkeley Edge Program at UC Berkeley, Nov 6, 2007.