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# Saskia Mioduszewski

## *curriculum vitae*

### Education and Honors

- APS Maria Goeppert Mayer Award, 2009.
- Sloan Fellowship Award, Alfred P. Sloan Foundation, 2006.
- Sambamurti Award, Brookhaven National Laboratory, 2005.
- Presidential Early Career Award for Scientists and Engineers, U.S. Department of Energy, 2004.
- Ph.D., Experimental Nuclear Physics, University of Tennessee, 1999. Doctoral thesis: *Centrality Dependence of Antiproton Production in Proton-Nucleus Collisions at 17.5 and 12.3 GeV/c*
- B.S., with honors, Physics and Mathematics, North Carolina State University, 1994.
- Paul H. Stelson Nuclear Physics Award, University of Tennessee, 1998.
- Science Alliance Stipend, University of Tennessee, 1994-1999.
- Marss Math Scholarship, Oak Ridge High School, TN, 1990.

### Professional Positions

#### *Texas A&M University*

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|------------------------------|-----------------------|
| September 2009 - present     | • Associate Professor |
| September 2005 - August 2009 | • Assistant Professor |

#### *Brookhaven National Laboratory*

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|-----------------------------|-----------------------------------|
| October 2003 - August 2005  | • Associate Scientist             |
| October 2001 - October 2003 | • Assistant Scientist             |
| January 2000 - October 2001 | • Postdoctoral Research Associate |

#### *University of Tennessee*

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|---------------------------------|-------------------------------|
| September 1994 - December 1999  | • Graduate Research Assistant |
| September 1994 - September 1996 | • Graduate Teaching Assistant |

### Research and Professional Activities

- Teaching: Introductory Mechanics for Life Science majors, Introductory Mechanics for Engineering majors, Analytical Mechanics for graduate students.
- Collaborator in the STAR Experiment at Relativistic Heavy-Ion Collider (RHIC) (2005-present)
- STAR Collaboration Council member (2005-present).
- Member of APS DNP (Division of Nuclear Physics) 2008 Nominating Committee.
- Member of APS DNP (Division of Nuclear Physics) 2009-2010 Program Committee.
- D.O.E. grant proposal reviewer.
- Co-convener of Parallel Sessions on "QCD at High Temperature" at BNL Workshop on Future Prospects in QCD at High Energy, 2006.
- Co-convener of High  $p_T$  Working Group for RHIC II, the next phase for the Relativistic Heavy-Ion Collider facility (2004-2006).
- Participating as Lecturer in Saturday Morning Physics Program at Texas A&M University for high school students (2006 and 2007).
- Co-convener of Parallel Sessions on "Quarks and Gluons in Hot/Dense and Cold Matter" at PANIC (Particles and Nuclei International Conference) 2005.

## Research and Professional Activities (continued)

- Collaborator in the PHENIX Experiment at RHIC (1995-2005).
- Co-convenor of the Physics Working Group on Photons in the PHENIX Collaboration (2002-2004).

### Invited Talks and Seminars

- November, 2009 • *Probing High-Temperature Nuclear Matter at the Relativistic Heavy-Ion Collider (RHIC)*, colloquium for the Physics Department at Trinity University, San Antonio, TX.
- May, 2009 • *Probing High-Temperature QCD Matter at the Relativistic Heavy-Ion Collider (RHIC) with High Transverse Momentum Particles*, invited talk for the *APS Meeting*, Denver, CO.
- November, 2008 • *High- $p_T$  Probes*, invited Talk for the *Tamura Symposium*, Austin, TX.
- June, 2008 • *Present experimental status: high- $p_T$  and initial state*, invited summary talk for the *Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions*, La Toxa, Spain.
- May, 2008 • *Photon-Hadron Correlations at RHIC*, invited talk for *Electromagnetic Probes Workshop of the RHIC/AGS Users' Meeting*, Upton, NY.
- April, 2008 • *Hard Probes at RHIC*, invited talk for *Winter Workshop on Nuclear Dynamics*, South Padre, TX.
- March, 2008 • *Hard Probes and Heavy Flavor from STAR*, invited talk for *Recontres de Moriond: QCD and High Energy Interactions*, La Thuile, Italy.
- August, 2007 • *Introduction to RHIC Physics*, invited lecture for *Carpathian Summer School of Physics*, Sinaia, Romania.
- July, 2007 • *Photon-Jet Correlations at RHIC*, invited talk for *Conference on Early Time Dynamics in Heavy Ion Collisions*, Montreal, Canada.
- June, 2007 • *Photon-Jet Correlations at RHIC*, invited talk for *Workshop on Hard Probes of Nuclear Collisions at RHIC & AGS Users' Meeting*, Upton, NY.
- March, 2007 • *Experimental Overview of High- $p_T$  Results from RHIC*, invited talk for *Workshop on High- $p_T$  physics at LHC*, Jyväskylä, Finland.
- August, 2006 • *Results from RHIC and a Look to the Future*, invited talk for the *Conference on the Application of Accelerators in Research and Industry (CAARI)*, Fort Worth, TX.
- February, 2006 • *Future Plans at RHIC*, invited talk at *RIKEN-CNS Workshop on the Physics of the Quark Gluon Plasma*, RIKEN, Wako, Japan.
- July, 2005 • *Tools to Characterize the Matter Created at RHIC*, Sambamurti Memorial Lectureship, Brookhaven National Laboratory, Upton, NY.
- June, 2005 • *Overview of RHIC Physics*, invited talk for the *RHIC Retreat*, Montauk, NY.
- June, 2005 • *Direct Photons at RHIC*, invited talk for the *Electromagnetic Probes Workshop, ECT\**, Trento, Italy.
- April, 2005 • *Probing the Matter Created at RHIC*, BNL Lecture, Brookhaven National Laboratory, Upton, NY.
- March, 2005 • *Jet Physics at RHIC*, colloquium for the Physics Department at Texas A&M University, College Station, Texas.
- July, 2004 • *Direct Photons at RHIC*, invited talk for the *Hot Quarks Conference*, Taos, New Mexico.
- June, 2004 • *Jet Quenching at RHIC*, invited talk for the *Physics in Collision Conference*, Boston, Massachusetts.
- March, 2004 • *High  $p_T$  Phenomena at RHIC*, colloquium for Physics Department at Ohio State University, Columbus, Ohio.
- December, 2003 • *The Search for the Quark Gluon Plasma with "Soft" Physics*, invited lecture talk for school on *Quark Gluon Plasma and Heavy Ion Collisions*, Torino, Italy.
- November, 2003 • *The Search for the Quark Gluon Plasma*, colloquium for Cyclotron Institute at Texas A&M University, College Station, Texas.

## Invited Talks and Seminars (continued)

- July, 2003 • *Heavy Ion Physics: An Experimental Review*, invited plenary talk for the *EPS High Energy Physics Conference*, Aachen, Germany.
- May, 2003 • *Recent High  $p_T$  Measurements from PHENIX*, seminar for Niels Bohr Institute, Copenhagen, Denmark.
- January, 2003 • *High  $p_T$  Measurements at RHIC*, invited talk for *Seventh Workshop on QCD*, Villefranche-sur-Mer, France.
- July, 2002 • *High  $p_T$  Measurements from PHENIX*, plenary talk for *Quark Matter Conference*, Nantes, France.
- January, 2002 • *High  $p_T$  Particle Production in PHENIX at RHIC*, colloquium for Physics Department at North Carolina State University, Raleigh, NC.
- August, 2001 • *Suppression of Hadrons with Large Transverse Momentum in Central Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV*, seminar for Physics Department (announcing release of PHENIX PRL on this topic), BNL, Upton, NY.
- June, 2001 • *Results of High  $p_T$  Measurements from PHENIX*, invited talk for *RHIC-INT Workshop*, LBNL, Berkeley, CA.
- March, 2001 • *Neutral Pion Production at RHIC*, seminar for Physics Department at Florida State University, Tallahassee, FL.

## Selected Publications

- 1 • B.I. Abelev et al., STAR Collaboration, “Studying Parton Energy Loss in Heavy-Ion Collisions via Direct-Photon and Charged-Particle Azimuthal Correlations”, arXiv:0912.1871.
- 2 • B.I. Abelev et al., STAR Collaboration, “Enhanced strange baryon production in Au+Au collisions compared to p+p at  $\sqrt{s_{NN}} = 200$  GeV”, Phys. Rev. C 77 (2008) 44908.
- 3 • J. Adams et al., STAR Collaboration, “Forward Neutral Pion Production in p+p and d+Au Collisions at  $\sqrt{s_{NN}}=200$  GeV”, Phys. Rev. Lett. 97 (2006) 152302.
- 4 • S.S. Adler et al., PHENIX Collaboration, “Measurement of Identified  $\pi^0$  and Inclusive Photon Second-Harmonic Parameter  $v_2$  and Implications for Direct Photon Production in  $\sqrt{s_{NN}}=200$  GeV Au+Au”, Phys. Rev. Lett. 96, (2006) 032302.
- 5 • S.S. Adler et al., PHENIX Collaboration, “Centrality Dependence of Direct Photon Production in  $\sqrt{s_{NN}}=200$  GeV Au+Au Collisions”, Phys. Rev. Lett. 94 (2005) 232301.
- 6 • K. Adcox et al., PHENIX Collaboration, “Single Identified Hadron Spectra from  $\sqrt{s_{NN}} = 130$  GeV Au+Au Collisions”, Phys. Rev. C 69 (2004) 024904.
- 7 • S.S. Adler et al., PHENIX Collaboration, “Scaling properties of proton and anti-proton production in  $\sqrt{s_{NN}} = 200$  GeV Au+Au collisions”, Phys. Rev. Lett 91, 172301 (2003).
- 8 • S.S. Adler et al., PHENIX Collaboration, “Absence of Suppression in Particle Production at Large Transverse Momentum in  $\sqrt{s_{NN}} = 200$  GeV d+Au Collisions”, Phys. Rev. Lett. 91, 072303 (2003).
- 9 • S.S. Adler et al., PHENIX Collaboration, “Suppressed  $\pi^0$  Production at Large Transverse Momentum in Central Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV”, Phys. Rev. Lett. 91, 072301 (2003).
- 10 • K. Adcox et al., PHENIX Collaboration, “Suppression of Hadrons with Large Transverse Momentum in Central Au+Au Collisions at  $\sqrt{s_{NN}} = 130$  GeV”, Phys. Rev. Letters 88, 022301 (2002).