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## Curriculum Vitae

### Education:

August 1992	Ph. D., Stony Brook University
June 1987	B.S., The University of Chicago

### Faculty appointments:

June 2010-present	Group Leader, Nuclear Theory Group, Brookhaven National Laboratory
March 2009-present	Adjunct Professor, Stony Brook University
March 2007-present	Senior Scientist, BNL
June 2002	Scientist with Tenure, BNL
October 1998-June 2002	Asst., Assoc. & Scientist appointments, BNL

### Post-doctoral appointments:

January 1997-October 2008	Research Asst. Prof., Niels Bohr Institute, Copenhagen, Denmark
September 1994-December 1996	Research Associate, National Institute for Nuclear Theory, Univ. of Washington
September 1992-August 1994	Research Associate, Theoretical Physics Institute, Univ. of Minnesota

### Visiting Appointments:

June 20-July 11, December 15-23, 2014	Guest Professor, Heidelberg University and EMMI Institute
February 1- 22, 2012	Fulbright Specialist, Univ. of Cape Town, South Africa
October 3- 21, 2011, February 2007	Visiting Scholar, Galileo Galilei Institute, Florence, Italy
January 2010-present	International Scientific Associate, Discovery Center, Niels Bohr Institute, Univ. of Copenhagen, Denmark
February-March, 2008	Visiting Scholar, Yukawa Institute for Theoretical Physics, Kyoto, Japan

March 2007	Andes Foundation Fellow, Universidad Federico Santa Maria, Valparaiso, Chile
June 2004-July 2005	Sabbatical leave at CEA Saclay, France, Bielefeld/Hamburg Univ., Germany, ECT* Trento, Italy
<b>Honors and Key Appointments:</b>	
June 2014- June 2016	Research Excellence International Guest Professor Award, University of Heidelberg
June and December 2014	EMMI Professor, EMMI Institute
January 2013-	Editor, Annals of Physics
February 2012	Senior Specialist Award, Fulbright Foundation
February 2012-February 2015	Member, DOE/NSF Nuclear Science Advisory Committee
March 2010-February 2011	Chair, Brookhaven Council (member, 2008-2011)
November 2007-present	Fellow, American Physical Society
October 2004-March 2005	US Research Fellow, Humboldt Foundation
October 2000-July 2003	Fellow, RIKEN-BNL Research Center
January 1997-October 2008	Royal Danish Research Council Fellow
September 1984-June 1987	Univ. of Chicago Undergraduate Scholarship

### **Brief Research Summary:**

I am a theoretical nuclear/particle physicist specializing in the areas of high energy QCD, non-equilibrium quantum field theory and heavy-ion collisions at ultra-relativistic energies. I have authored **~100** publications (including several invited reviews). These have **~ 10650** citations to date in the INSPIRE database with an H-index of **51** – including **1450** citations for papers published after January 2010. One of my papers has over **1000** citations and three others have over **500** citations each. I have delivered **> 200** invited talks and **25** lecture series. I am very interested in science outreach. I have collaborated on several semi-popular articles- an article in Scientific American is in preparation. My recent research has been quoted in Science, Physics World, Ars Technica, Discover, Symmetry, International Business Times and the Associated Press.

### **Administrative Experience:**

- A. Group Leader (since June 2010) of the Nuclear Theory Group at Brookhaven National Laboratory. Our Group is the most highly rated among all National Lab Nuclear Theory Groups. *Most recently,*

*my group was ranked one of the top five (out of 62) DOE supported university and national lab groups.*

- B. Served on the Brookhaven Council (equivalent of University Senate) for three years, and was elected Chair in my final year. As Council Chair, I lead 18 Senior Scientists across the laboratory in evaluating tenure cases, and met monthly with the Laboratory Director to discuss concerns of the Scientific Staff.
- C. Currently serve on the DOE/NSF Nuclear Science Advisory Committee, a committee comprised of 20 members across all areas of Nuclear Physics, providing advice on current and future scientific projects in the field.
- D. Organized over **40** conferences, and served on a number of international advisory committees. Notably, I co-organized a 2 month program at the Institute for Nuclear Theory (INT) in Seattle for ~130 researchers, that resulted in a 550 page document I co-edited, laying out the science case for a future \$1 billion Electron-Ion Collider project in the United States

### Publications in refereed journals and invited reviews

(Note: \* denotes 50+ citations, \*\* denotes 100+ citations, \*\*\* denotes 500+ citations in INSPIRE  
**29** 50+ papers, **15** 100+ papers, **2** 250+ papers, **3** 500+ papers, **1** 1000+ paper)

1. *Initial state geometry and fluctuations in Au+Au, Cu+Au and U+U collisions at RHIC*, B. Schenke, P. Tribedy and R. Venugopalan, arXiv:**1403.2232**, submitted to Phys. Rev. C
2. *Basin of attraction for turbulent thermalization and the range of validity of classical-statistical simulations*, J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan, arXiv:**1312.5216**, JHEP, in press (2014).
3. *Universal attractor in a highly occupied non-Abelian plasma*, J. Berges, K. Boguslavski, S. Schlichting and R. Venugopalan, arXiv:**1311.3005**, Phys. Rev. D, in press (2014).
4. *Multiplicity distributions in p+p, p+A and A+A collisions from Yang-Mills dynamics*, B. Schenke, P. Tribedy and R. Venugopalan, Phys. Rev. C**89**, 024901 (2014).
5. *Quarkonium production in high energy proton-nucleus collisions: CGC meets NRQCD*, Z.-B. Kang, Y.-Q. Ma and R. Venugopalan, JHEP **1401**, 056 (2014).
6. *Turbulent thermalization of the Quark-Gluon Plasma*, J. Berges, K. Boguslavski, S. Schlichting, R. Venugopalan, Phys. Rev. D**89** (2014) 074011
7. \* *Initial state geometry and the role of hydrodynamics in proton-proton, proton-nucleus and deuteron-nucleus collisions*, A. Bzdak, B. Schenke, P. Tribedy, R. Venugopalan, Phys. Rev. C**87** (2013) 064906 (editor's suggestion).
8. \* *Comparison of the Color Glass Condensate to do-hadron correlations in proton-proton and proton-nucleus collisions*, K. Dusling and R. Venugopalan, Phys. Rev. D**87** (2013) 094034.

9. *Analysis of combined HERA data in the Impact Parameter dependent Saturation model*, Rezaiean, M. Siddikov, M. Van de Klundert and R. Venugopalan, *Phys. Rev. D* **87** (2013) 034002
10. *Explanation of systematics of CMS  $p+Pb$  high multiplicity di-hadron data at  $\sqrt{s} = 5.02$  TeV*, K. Dusling and R. Venugopalan, *Phys. Rev. D* **87** (2013) 054014.
11. *Evidence for BFKL and saturation dynamics from di-hadron spectra at the LHC*, K. Dusling and R. Venugopalan, *Phys. Rev. D* **87** (R) (2013) 051502
12. \* *Event-by-event anisotropic flow in heavy-ion collisions from combined Yang-Mills and viscous fluid dynamics*, C. Gale, S. Jeon, B. Schenke, P. Tribedy and R. Venugopalan, *Phys. Rev. Lett.* **110** (2013) 012302.
13. *Instability induced pressure isotropization in a longitudinally expanding system*, K. Dusling, T. Epelbaum, F. Gelis and R. Venugopalan, *Phys. Rev. D* **86**, 085040 (2012).
14. \* *Event-by-event gluon multiplicity, energy density and eccentricities in ultrarelativistic heavy-ion collisions*, B. Schenke, P. Tribedy and R. Venugopalan, *Phys. Rev. C* **86**, 034908 (2012).
15. \* *Fluctuating Glasma initial conditions and flow in heavy ion collisions*, Schenke, P. Tribedy, and R. Venugopalan, *Phys. Rev. Lett.* **108**, 252301 (2012).
16. *Azimuthal collimation of long range rapidity correlations by strong color fields in high multiplicity hadron-hadron collisions*, K. Dusling and R. Venugopalan, *Phys. Rev. Lett.* **108**, 262001 (2012).
17. *QCD saturation at the LHC: comparisons of models to  $p+p$  and  $A+A$  collisions and predictions for  $p+Pb$  collisions*, P. Tribedy and R. Venugopalan, *Phys. Lett. B* **710** (2012) 125.
18. \* *Bose-Einstein Condensation and Thermalization of the Quark-Gluon Plasma*, J.-P. Blaizot, F. Gelis, J. Liao, L. McLerran and R. Venugopalan, *Nucl. Phys. A* **873** (2012) 68.
19. *Renormalization Group evolution of multi-gluon correlators in high energy QCD*, Dumitru, J. Jalilian-Marian, T. Lappi, B. Schenke and R. Venugopalan, *Phys. Lett. B* **706** (2011) 219.
20. *The initial spectrum of fluctuations in the little bang*, K. Dusling, F. Gelis and R. Venugopalan, *Nucl. Phys. A* **872** (2011) 161.
21. \* *Saturation models of HERA DIS data and inclusive hadron distributions in  $p+p$  collisions at the LHC*, P. Tribedy and R. Venugopalan, *Nucl. Phys. A* **850**, 136 (2011).
22. \* *The ridge in proton-proton collisions at the LHC*, A. Dumitru, K. Dusling, F. Gelis, J. Jalilian-Marian, T. Lappi and R. Venugopalan, *Phys. Lett. B* **697**, 21 (2011).
23. \* *Role of quantum fluctuations in a system with strong fields: onset of hydrodynamic flow*, K. Dusling, T. Epelbaum, F. Gelis and R. Venugopalan, *Nucl. Phys. A* **850**, 69 (2011).

24. **\*\*** *The Color Glass Condensate*, F. Gelis, E. Iancu, J. Jalilian-Marian and R. Venugopalan, *Ann. Rev. Nucl. Part. Sci.* **60**, 463, (2010).
25. **\*** *Long range two-particle rapidity correlations in A+A collisions from high energy QCD evolution*, K. Dusling, F. Gelis, T. Lappi and R. Venugopalan, *Nucl. Phys.* **A836**,159 (2010).
26. *Non-perturbative computation of double inclusive gluon production in the Glasma*, T. Lappi, S. Srednyak and R. Venugopalan, *JHEP* **01**, 066 (2010).
27. *Two introductory lectures on high energy QCD and heavy ion collisions*, Banerjee, J. Nayak and R. Venugopalan, **arXiv: 0810:3553** [hep-ph], *Lect. Notes Phys.* **785**:105 (2010).
28. *Three particle correlation from glasma flux tubes*, K. Dusling, D. Fernandez-Fraile and R. Venugopalan, *Nucl. Phys.* **A828**:161 (2009).
29. **\*** *High energy factorization in nucleus-nucleus collisions. III. Long range rapidity correlations*, Gelis, T. Lappi and R. Venugopalan, *Phys. Rev.* **D79**:094017 (2009).
30. *How particles emerge from decaying classical fields in heavy ion collisions: towards a kinetic theory of the Glasma*, F. Gelis, S. Jeon and R. Venugopalan, *Nucl. Phys. A* **817**, 61 (2009).
31. **\*** *High energy factorization in nucleus-nucleus collisions. II. Multi-gluon correlations*, Gelis, T. Lappi and R. Venugopalan, *Phys. Rev. D* **78**, 054020 (2008).
32. *Nuclear enhancement and suppression of diffractive structure functions at high energies*, Kowalski, C. Marquet, T. Lappi and R. Venugopalan, *Phys. Rev. C* **78**, 045201 (2008).
33. **\*\*** *Glasma flux tubes and the near side ridge phenomenon at RHIC*, Dumitru, F. Gelis, L. McLerran and R. Venugopalan, *Nucl. Phys. A* **810**, 91 (2008).
34. **\*** *High energy factorization in nucleus-nucleus collisions. I*, Gelis, T. Lappi and R. Venugopalan, *Phys. Rev. D* **78**, 054019 (2008).
35. **\*** *Nuclear enhancement of universal dynamics of high parton densities*, Kowalski, T. Lappi and R. Venugopalan, *Phys. Rev. Lett.* **100**, 022303 (2008).
36. **\*** *High Energy Scattering in QCD*, Gelis, T. Lappi and R. Venugopalan, *Int. J. Mod. Phys. E* **16**, 2595 (2007).
37. *Lectures on multi-particle production in the Glasma*, Gelis and R. Venugopalan, *Acta. Phys. Polon. B* **37** (2006).
38. **\*** *Universality of the saturation scale and the initial eccentricity in heavy ion collisions*, T. Lappi and R. Venugopalan, *Phys. Rev. C* **74**:054905 (2006).

39. \* *Particle production in field theories coupled to strong external sources. II. Generating functions*, F. Gelis and R. Venugopalan, Nucl. Phys. A **779**, 177 (2006).
40. *Limiting fragmentation in hadron-hadron collisions at high energies*, F. Gelis, A. Stasto and R. Venugopalan, Eur. J. Phys. C **48**, 489 (2006).
41. \*\* *The unstable glasma*, P. Romatschke and R. Venugopalan, Phys. Rev. D **74**:045011, (2006).
42. *Quark Pair Production in high energy pA collisions: General Features*, Fujii, F. Gelis and R. Venugopalan, Nucl. Phys. A **780**:146 (2006).
43. \* *Particle production in field theories coupled to strong external sources. I. Formalism and main results*, F. Gelis and R. Venugopalan, Nucl. Phys. A **776**, 135 (2006).
44. \*\* *Collective non-Abelian instabilities in a melting Color Glass Condensate*, P. Romatschke and R. Venugopalan, Phys. Rev. Lett. **96**:062302 (2006).
45. *Quantitative study of the violation of  $k_t$  factorization in the hadroproduction of quarks at collider energies*, H. Fujii, F. Gelis and R. Venugopalan, Phys. Rev. Lett. **95**:162002 (2005).
46. *A classical Odderon in QCD at high energies*, S. Jeon, R. Venugopalan, Phys. Rev. D **71**:125003 (2005).
47. \*\* *Study of the Fundamental Structure of Matter with an Electron-Ion Collider*, Deshpande, R. Milner, R. Venugopalan, W. Vogelsang, Ann. Rev. Nucl. Sci. **55** (2005).
48. *The Color Glass Condensate: A summary of key ideas and recent developments*, R. Venugopalan, arXiv:hep-ph/0412396, extended version of AIP. Conf. Proc. **739**:97 (2005).
49. *Random walks of partons in  $SU(N_c)$  and classical representations of color charge in QCD at small  $x$* , S. Jeon and R. Venugopalan, Phys. Rev. D **70**: 105012 (2004).
50. \*\* *High energy pA collisions in the color glass condensate approach. II Quark Production*, J.-P. Blaizot, F. Gelis and R. Venugopalan, Nucl. Phys. A **743**:57 (2004).
51. \*\* *High energy pA collisions in the color glass condensate approach. I. Gluon production and the Cronin effect*, J.-P. Blaizot, F. Gelis and R. Venugopalan, Nucl. Phys. A **743**:13 (2004).
52. \* *Large mass  $Q$ -anti- $Q$  production from the color glass condensate*, F. Gelis and R. Venugopalan, Phys. Rev. D **69**:014019 (2004).
53. *Finite size effects on nucleation in a first order phase transition*, Fraga and R. Venugopalan, Physica A **345/1-2**, 121 (2004).
54. \* *The Cronin effect, quantum evolution and the color glass condensate*, Jalilian-Marian, Y. Nara and R. Venugopalan, Phys. Lett. B **577**, 54 (2003).

55. **\*\*** *Classical gluodynamics of high energy nuclear collisions: An erratum and an update*, Krasnitz, Y. Nara and R. Venugopalan, Nucl. Phys. A **727**, 427, (2003).
56. **\*\*\*** *The color glass condensate and high energy scattering in QCD*, E. Iancu and R. Venugopalan, arXiv:hep-ph/0303204, QGP3, Eds. R.C. Hwa and X.-N.Wang, World Scientific Publishers (2003).
57. **\*\*** *Gluon production in the color glass condensate model of ultrarelativistic finite nuclei*, Krasnitz, Y. Nara and R. Venugopalan, Nucl. Phys. A **717** 268 (2003).
58. **\*** *Elliptic flow of colored glass in high energy heavy ion collisions*, Krasnitz, Y. Nara and R. Venugopalan, Phys. Lett. B **554**, 21 (2003).
59. *Classical computation of elliptic flow at large transverse momentum*, D. Teaney and R. Venugopalan, Phys. Lett. B **539** : 53 (2002).
60. **\*** *Anomalous chirality fluctuations in the initial stage of heavy ion collisions and parity odd bubbles*, D. Kharzeev, A. Krasnitz and R. Venugopalan, Phys. Lett. B **545**, 298 (2002).
61. **\*** *Generalized scaling of the transverse mass spectrum at the Relativistic Heavy-Ion Collider*, Schaffner-Bielich, D. Kharzeev, L. McLerran, R. Venugopalan, Nucl. Phys. A **705**: 494 (2002).
62. **\*\*** *Coherent gluon production in very high energy heavy ion collisions*, A. Krasnitz, Y. Nara and R. Venugopalan, Phys. Rev. Lett. **87**, 192302 (2001).
63. *Hard thermal loops and beyond in the finite temperature world-line formulation of QED*, R. Venugopalan and J. Wirstam, Phys. Rev. D **63**, 125022 (2001).
64. **\*** *From colored glass condensate to gluon plasma: Equilibration in high energy heavy ion collisions*, Bjorker and R. Venugopalan, Phys. Rev. C **63**, 024609 (2001).
65. **\*\*** *The initial gluon multiplicity in heavy ion collisions*, Krasnitz and R. Venugopalan, Phys. Rev. Lett. **86**, 1717 (2001).
66. *Wong's equations and the small  $x$  effective action in QCD*, Jalilian-Marian, S. Jeon and R. Venugopalan, Phys. Rev. D **63**, 036004 (2001).
67. *Minding one's  $P$ 's and  $Q$ 's: From the one loop effective action in quantum field theory to classical transport theory*, J. Jalilian- Marian, S. Jeon, R. Venugopalan, J. Wirstam, Phys. Rev. D **62**, 045020 (2000).
68. **\*\*** *The initial energy density of gluons produced in very high energy nuclear collisions*, Krasnitz and R. Venugopalan, Phys. Rev. Lett., **84**, (2000) 4309.
69. **\*\*** *Non-perturbative computation of gluon mini-jet production in nuclear collisions at very high energies*, A. Krasnitz and R. Venugopalan, Nucl. Phys. B **557**, (1999) 237.

70. \*\* *Fock space distributions, structure functions, higher twists and small  $x$* , McLerran and R. Venugopalan, Phys. Rev. D **59**, 094002 (1999).
71. \* *Classical methods in DIS and nuclear scattering at small  $x$* , Venugopalan, Acta Phys. Polon. B **30**, 3731 (1999).
72. *Introduction to light cone field theory and high energy scattering*, Venugopalan, arXiv:nucl-th/9808023, Ed. J. Cleymans, Springer Lect. Notes in Physics (1998).
73. *Boost covariant gluon distributions in large nuclei*, McLerran and R. Venugopalan, Phys. Lett. B **424**, 15 (1998).
74. \*\* *Hydrodynamical Description of 200 A GeV/c S+Au Collisions: Hadron and Electromagnetic Spectra*, J. Sollfrank, P. Hovinen, M. Kataja, P. V. Ruuskanen, M. Prakash and R. Venugopalan, Phys. Rev. C **55**, 392 (1997).
75. *Small  $x$  Parton Distributions and Initial Conditions for Ultrarelativistic Nuclear Collisions*, Venugopalan, Comments in Nuclear and Particle Physics, vol. **22**, no. **3** 113 (1997).
76. *Lattice Computations of Small  $x$  Parton Distributions in a Model of Parton Densities in Very Large Nuclei*, Rajiv Gavai and R. Venugopalan, Phys. Rev. D **54**, 5795 (1996).
77. \*\* *Quantum Corrections to the Weizsäcker--Williams Gluon Distribution Function at small  $x$* , Ayala, J. Jalilian--Marian, L. McLerran and R. Venugopalan, Phys. Rev. D **53**, 458 (1996).
78. \* *The Gluon Propagator in non--Abelian Weizsäcker--Williams fields*, Ayala, J. Jalilian--Marian, L. McLerran and R. Venugopalan, Phys. Rev. D **52**, 2935 (1995).
79. \* *Nucleation of Quark--Gluon Plasma from Hadronic Matter*, J. Kapusta, A. Vischer and R. Venugopalan, Phys. Rev. C **51**, 901 (1995).
80. \*\*\* *Green's Functions in the Color Field of A Large Nucleus*, L. McLerran and R. Venugopalan, Phys. Rev. D **50**, 2225 (1994).
81. \*\*\* *Gluon Distribution Functions for Very Large Nuclei at Small Transverse Momentum*, L. McLerran and R. Venugopalan, Phys. Rev. D **49**, 3352 (1994).
82. \*\*\* *Computing Quark and Gluon Distribution Functions for Very Large Nuclei*, L. McLerran and R. Venugopalan, Phys. Rev. D **49**, 2233 (1994).
83. *Dynamical Growth Rate of a Diffuse Interface in First Order Phase Transitions*, R. Venugopalan and A. P. Vischer, Phys. Rev. E **49**, 5849 (1994).
84. *Screening Mass from Chiral Perturbation Theory, Virial Expansion, and the Lattice*, L. Eletsky, J. I. Kapusta and R. Venugopalan, Phys. Rev. D **48**, 4398 (1994).

85. *How fast is equilibration in hot hadronic matter?* Madappa Prakash, Manju Prakash, R. Venugopalan, G. Welke, Phys. Rev. Lett. **70**, 1228 (1993).
86. **\*\*** *Non--equilibrium properties of hadronic mixtures*, Madappa Prakash, Manju Prakash, R. Venugopalan, G. Welke, Physics Reports **227**, 321 (1993).
87. **\*** *Thermodynamics of interacting hadrons at finite temperature*, R. Venugopalan and M. Prakash, Nucl. Phys. A **546**, 718 (1992).
88. *A quantum mechanical model of color transparency*, J.-P. Blaizot, R. Venugopalan and M. Prakash, Phys. Rev. D **45**, 814 (1992).
89. *The speed of sound in an interacting pion gas*, G. Welke, R. Venugopalan and M. Prakash, Phys. Lett. B **245**, 137 (1990).
90. **\*** *Anti--proton production as a baryometer in ultrarelativistic heavy ion collisions*, S. Gavin, M. Gyulassy, M. Plümer and R. Venugopalan, Phys. Lett. B **234**, 175 (1990).
91. *Flow effects on transverse momentum spectra in ultrarelativistic nuclear collisions*, R. Venugopalan and M. Prakash, Phys. Rev. C **41**, 221 (1990).

### Publications in Conference Proceedings

1. *Thermalization of the world's smallest fluids: recent developments*, R. Venugopalan, arXiv:**1404.6976**, to be published in a Special Issue of Nuclear Physics A.
2. *Gluon field fluctuations in nuclear collisions: Multiplicity and eccentricity distributions*, B. Schenke, P. Tribedy and R. Venugopalan, arXiv:**1312.5588**
3. *Glasma fluctuations in heavy-ion collisions*, B. Schenke, P. Tribedy and R. Venugopalan, AIP Conf.Proc. 1560 (2013) 650-654.
4. *Long range correlations in high multiplicity hadron collisions: building bridges with ridges*, R. Venugopalan, arXiv:**1312.0113**, to be published in a Special Issue of Annals of Physics.
5. *IP-Sat: Impact-Parameter dependent Saturation model revised*, A.H. Rezaeian, M. Siddikov, M. Van de Klundert and R. Venugopalan, arXiv: **1307.0165**, PoS DIS2013 (2013) 060.
6. *Thermalization and Bose-Einstein Condensation in Overpopulated Glasma*, J.-P. Blaizot, F. Gelis, J. Liao, L. McLerran and R. Venugopalan, arXiv:**1210.6838** [hep-ph].
7. *Quantum chaos in the perfect fluid: spectrum of initial fluctuations in the little bang*, K. Dusling, T. Epelbaum, F. Gelis, and R. Venugopalan, arXiv:**1210.6053** [hep-ph].

8. *Initial state fluctuations and higher harmonic flow in heavy-ion collisions*, C. Gale, S. Jeon, B. Schenke, P. Tribedy and R. Venugopalan, arXiv:**1210.5144** [hep-ph].
9. *The dynamics of strongly correlated gluons at high energies*, R. Venugopalan, PoSQNP2012 (2012) 019.
10. *Initial state and thermalization*, K. Dusling, T. Epelbaum, F. Gelis, and R. Venugopalan, arXiv:**1207.5401** [hep-ph].
11. *Computing early time dynamics in heavy ion collisions: status, problems and prospects*, R. Venugopalan, arXiv:**1109.6532** [hep-ph].
12. *Ekpyrosis and Inflationary dynamics in heavy ion collisions: the role of quantum fluctuations*, K. Dusling, F. Gelis and R. Venugopalan, *J. Phys. G***38**, 124120 (2011).
13. *Inclusive hadron distributions in p+p collisions from saturation models of HERA DIS data*, P. Tribedy and R. Venugopalan, arXiv:**1101.5922** [hep-ph].
14. *From many body wee parton dynamics to perfect fluid: a standard model for heavy ion collisions*, R. Venugopalan, arXiv:**1012.4699**, PoS:ICHEP2010:567 (2010).
15. *Long range rapidity correlations and the ridge in A+A collisions*, Gelis, T. Lappi and R. Venugopalan, *Nucl. Phys. A***830**:591C (2009).
16. *Diffraction structure functions in nuclei*, in proceedings of DIS2009, T. Lappi, H. Kowalski, C. Marquet and R. Venugopalan, arXiv:0906.3637 [hep-ph].
17. *QCD on the light cone and heavy ion collisions: the CGC, the Glasma and multi-gluon correlations*, R. Venugopalan, PoS: LC2008:**029**, (2008).72.
18. *The Glasma initial state and high energy factorization*, F. Gelis, T. Lappi and R. Venugopalan, arXiv:0810.1610 [hep-ph], *Nucl. Phys. A***820**:111C (2009).
19. *From Glasma to Quark Gluon Plasma in heavy ion collisions*, R. Venugopalan, arXiv:0806.1356 [hep-ph], *J. Phys. G***35**:104003 (2008).
20. *Nuclear diffractive structure functions at high energies*, C. Marquet, H. Kowalski, T. Lappi and R. Venugopalan, arXiv: 0805.4809 [hep-ph], proceedings of the 43<sup>rd</sup> Rencontres de Moriond Conference.
21. *Universal features of QCD dynamics in hadrons and nuclei at higher energies*, R. Venugopalan, arXiv:0707.1867, DIS 2007.
22. *Heavy flavor production in pA collisions*, H. Fujii, F. Gelis & R. Venugopalan, arXiv:hep-ph/0702174, *J. Phys. G***34**:S937 (2007).

23. *Multi-particle production in the Glasma at NLO and plasma instabilities*, R. Venugopalan, Nucl. Phys. **A783**:149 (2007).
24. *Particle production and AGK relations in the Color Glass Condensate*, F. Gelis and R. Venugopalan, arXiv:hep-ph/0608118, Nucl. Phys. **A782**:297 (2007); Nucl.Phys. **A785**:146 (2007).
25. *From HERA to LHC through the Color Glass Condensate*, R. Venugopalan, in Proceedings (Part B) of “HERA and the LHC: a workshop”, arXiv:hep-ph/0601013, page 554.
26. *Hadronic scattering in the Color Glass Condensate*, R. Venugopalan, arXiv: hep-ph/0511117, in Proceedings of XXth Blois Conference.
27. *A Weibel instability in the Color Glass Condensate*, P. Romatschke and R. Venugopalan, Eur. Phys. J **A29**: 71 (2006).
28. *Violation of  $k_t$  factorization in quark production from the Color Glass Condensate*, H. Fujii, F. Gelis, and R. Venugopalan, Nucl. Phys. **A774**:793 (2006).
29. *Quark production in high energy proton-nucleus collisions*, H. Fujii, F. Gelis and R. Venugopalan, Eur. Phys. J. **Ç 43**: 139 (2005).
30. *The Color Glass Condensate:an overview*, R. Venugopalan, Eur. Phys. J. **Ç 43**: 337 (2005).
31. *Three lectures on the Color Glass Condensate*, R. Venugopalan, HADRON- RANP 2004, Angra Dos Reis, Brazil, AIP. Conf. Proc.739:97 (2005).
32. *The Color Glass Condensate*, R. Venugopalan, in Proceedings of ICPAQGP 2005, Phys.Conf.Ser.**50**:70-78, (2006).
33. *Proton-Nucleus Collisions in the Color Glass Condensate Framework*, J.-P. Blaizot, F. Gelis and R. Venugopalan, hep- ph/0410032, in Proceedings of SEWM 2004.
34. *Finite Size constraints on nucleation of hadrons in a Quark- Gluon Plasma*, E. Fraga and R. Venugopalan, Braz. J. Phys. **34**: 315 (2004).
35. *Initial state effects in the Color Glass Condensate*, F. Gelis and R. Venugopalan, Phys. **G30**:**S995** (2004).
36. *Probing A Color Glass Condensate In High Energy Heavy Ion Collisions*, Krasnitz, Y. Nara and R. Venugopalan, Braz. J. Phys. **33**, 223 (2003).
37. *Elliptic flow from color glass condensate*, A. Krasnitz, Y. Nara, and R. Venugopalan, Nucl. Phys. A **715**, 669 (2003).
38. *Recent progress in computing initial conditions for high energy heavy ion collisions*, Krasnitz, Y. Nara, and R. Venugopalan, Nucl. Phys. A **702**, 227 (2002).

39. *Scaling properties of the transverse mass spectra*, J. Schaffner-Bielich, D. Kharzeev, L. McLerran and R. Venugopalan, arXiv:nucl-th/0202054, in proceedings of Hirschegg 2002.
40. *Recent progress in computing initial conditions for high energy heavy ion collisions*, R. Venugopalan, in QCD Perspectives on Hot & Dense Matter, Cargese Summer School, Ed.: J.-P. Blaizot & E. Iancu, Kluwer NATO Science Series (2002).
41. *Small  $x$  physics and the initial conditions in heavy ion collisions*, R. Venugopalan, Nucl. Phys. A **698**, 209 (2002).
42. *Multiparticle production at RHIC and LHC: A classical point of view*, A. Krasnitz and R. Venugopalan, hep-ph/0102118, in proceedings of ISMD2000, Tihany, Hungary, October 2000.
44. *Deeply inelastic scattering off nuclei at RHIC*, R. Venugopalan, hep-ph/0102087, MIT EPIC Workshop, AIP Conf. Proc. **588**, 121 (2001).
45. *Solution of the Boltzmann equation for gluons after a heavy-ion collision*, J. Bjorker and R. Venugopalan, hep-ph/0011001, in the proceedings of SEWM 2000.
46. *What's new at small  $x$* , R. Venugopalan, Pramana **55**, 73 (2000).
47. *Non-perturbative gluodynamics of high energy heavy-ion collisions*, A. Krasnitz and R. Venugopalan, hep-ph/0004116, Workshop on QCD, Villefranche-sur-Mer, France, Jan 2000.
48. *The first fermi in a high energy nuclear collision*, A. Krasnitz and R. Venugopalan, hep-ph/991039, ISMD99, Providence, 9-13 Aug. 1999.
49. *Parton saturation, production, and equilibration in high energy nuclear collisions*, R. Venugopalan, hep-ph/9907209, 34th Rencontres de Moriond,.
50. *Making glue in high energy nuclear collisions*, R. Venugopalan, hep-ph/9905319, 8th Mexican School of Particles and Fields.
51. *Real time simulations of nuclear collisions*, R. Venugopalan, hep-ph/9808332, in proceedings of 3rd International workshop on continuous advances in QCD, Minneapolis, MN, April 16th--19th, 1998.
52. *On colliding ultrarelativistic nuclei on a transverse lattice*, R. Venugopalan, in proceedings of ICPAQGP 1997, March 1997, World Scientific publishers.
53. *A model of large parton densities in pQCD*, R. Venugopalan, in proceedings of Brookhaven HERA workshop, November 17th--18th, 1995.
54. *Wee Partons in Large Nuclei: from Virtual Dreams to Hard Reality*, R. Venugopalan, Nucl. Phys. A **590** (1995) 147c.

55. *Photons and Hadrons from Hydrodynamical Simulations of Ultrarelativistic Nuclear Collisions*, P. Huovinen, M. Kataja, V. Ruuskanen, J. Sollfrank and R. Venugopalan, Physics Days, Finland, 1995.
56. *Parton distributions of large nuclei at small  $x$* , R. Venugopalan, in Proceedings of V conference on the intersections of particle and nuclear physics, St. Petersburg, FL, May 31st--June 6th, 1994.
57. *Parton distributions at small  $x$* , R. Venugopalan, in Proceedings of Rencontres de Moriond, Meribel, France, March 17th--24th, 1994.
58. *The color field of a large nucleus at small  $x$* , R. Venugopalan, in Minnesota workshop on continuous advances in QCD, TPI--MINN--94--29, Ed. A. Smilga, World Scientific (1994).
59. *Coupling of Longitudinal and Transverse Flows in the Hydrodynamics of in Ultrarelativistic Nuclear Collisions*, R. Venugopalan, M. Prakash, M. Kataja, V. Ruuskanen, Nucl. Phys. A **566**, (1994) 473c.
60. *How fast is Equilibration in Hot Hadronic Matter*, Madappa Prakash, Manju Prakash, R. Venugopalan, G. Welke, Nucl. Phys. A **566**, (1994) 403c.
62. *How fast is Equilibration in Hot Hadronic Matter*, R. Venugopalan, in Proceedings of Interdisciplinary Workshop on Transport Phenomena, Les Houches, February 1993.
63. *2+1--D hydrodynamics of secondaries in ultrarelativistic nuclear collisions*, by R. Venugopalan, M. Prakash, M. Kataja and V. Ruuskanen, in Proceedings of VII winter workshop on nuclear dynamics, World Scientific, Singapore, (1991).
64. *Hadrons off-equilibrium*, by Madappa Prakash, Manju Prakash, R. Venugopalan, G. Welke, in Proceedings of VII winter workshop on nuclear dynamics, World Scientific, Singapore, (1991).

### Other Publications

1. *Predictions for  $p+Pb$  Collisions at  $\sqrt{s_{NN}} = 5 \text{ TeV}$* , J. Albacete, ..., R. Venugopalan, ... et al., Int. J. Mod. Phys. E **22** (2013) 1330007
2. \* *Electron-Ion Collider: The Next QCD Frontier-Understanding the glue that binds us all*, A. Accardi, ..., R. Venugopalan, ... et al., **arXiv:1212.1701**, EIC White Paper.
3. \*\* *Gluons and the quark sea at high energies: distributions, polarization, tomography*, Eds. D. Boer, M. Diehl, R. Milner, R. Venugopalan, W. Vogelsang, **arXiv:1108.1713** [nucl-th], INT report on EIC Science.
4. *Saturation, the Color Glass Condensate and the Glasma: what have we learned from RHIC ?* Proceedings of the RIKEN-BNL workshop, May 10-12, 2010, Eds. J. Dunlop, L. McLerran, D. Morrison, R. Venugopalan, Nucl. Phys. A **854** (2011) 1-256.
5. *A high luminosity, high energy electron ion collider*, White paper submitted to NSAC LRP, April 2007, C. Aidala et al.

6. *Physics opportunities with  $e+A$  collisions at an electron ion collider*, C. Aidala et al.
7. *White paper on the Electron-Ion Collider*, R. Holt et al., submitted to the Nuclear Science Advisory Committee, March 2001.
8. Proceedings of eRHIC BNL summer meeting, Eds. L. McLerran and R. Venugopalan, Proceedings of 2nd eRHIC workshop, Ed. L. McLerran et al., BNL Formal Report 52592

### **Conference Organization**

1. Co-organizer, RBRC workshop on Thermalization, April 2-4, 2014
2. Co-convenor, Confinement XI, St. Petersburg, Russia, Sept. 8-12, 2014
3. Co-organizer, POETIC V, Yale Univ., Sept. 22-26, 2014
4. Local Organizing Committee, IS2014, Napa, California, Dec. 4-7, 2014
5. Co-organizer, program on QCD Landscape of nucleons and nuclei, LBNL, August 12-16, 2013
6. Co-organizer, National Nuclear Physics Summer School, Stony Brook, NY, July 15-27, 2013.
7. Co-organizer, POETIC 2013, Valparaiso, Chile, March 4-8, 2013.
8. Co-convenor, ISMD 2012, Kielce, Poland, Sept. 17-21, 2012.
9. Co-organizer, POETIC 2012, Indiana University, August 20-22, 2012.
10. Local organizing committee and Program Committee, Quark Matter 2012, Washington DC, August 12-18, 2012.
11. Co-organizer, RBRC workshop on Forward Physics at RHIC, July 30-August 1, 2012.
12. Co-organizer (Program Committee), DIS2011, Jlab, April 10-15, 2011.
13. Co-organizer, INT Program on Gluons and the quark sea at high energies: distributions, polarization, tomography, Sept. 13- Nov. 19, 2010.
14. Co-organizer, RIKEN-BNL Workshop on Saturation, the Color Glass Condensate and Glasma: what have we learned from RHIC?, BNL, May 10-12, 2010.
15. Co-Organizer, INT Workshop on Physics of a High Energy Electron Ion Collider, October 19th-23rd, 2009.

16. Co-organizer, Session on Color Glass Condensate, RHIC AGS Users meeting, June 2nd, 2009.
17. Co-Convenor, Session on Future Facilities, CIPANP, San Diego, May 26th-31st, 2009.
18. Quantum Field Theory in Extreme Environments, Saclay and IAP Paris, April 23rd-25th, 2009.
19. Program on Initial Conditions at RHIC and LHC, International Center, Dona Paula, Goa, India, Sept. 1st-19th, 2008.
20. Trento workshop on the Electron Ion Collider, July 14th-18th, 2008.
21. Co-Convenor, eA parallel session, 4th Electron Ion Collider Workshop, Hampton Univ., May 19th-23rd, 2008.
22. Co-organizer, EIC working group meeting, MIT, April 6th-7th, 2007.
23. Convenor, QCD Theory workshop, Washington DC, Dec. 15th-16th, 2006
24. Co-organizer, workshop on Future Prospects in QCD, BNL, July 17th-21st, 2006.
25. Co-organizer, RBRC workshop on RHIC Physics in context of the Standard Model, June 18th-23rd, 2006.
26. Co-organizer, International Conference on Strong and Electroweak Matter, BNL, May 10th-13th, 2006.
27. Co-organizer, Satzfest: 20 years of J/Psi suppression, BNL, May 9th, 2006.
28. Co-organizer, RHIC-II and eRHIC Satellite Meeting, PANIC, Santa Fe, October 2005.
29. Co-organizer, 2nd Electron Ion Collider workshop, JLAB, March 15th- 17th, 2004.
30. Co-organizer, eRHIC workshop, BNL, Jan.29th-31st, 2004.
31. Co-organizer, RIKEN-BNL workshop on High  $p_t$  physics at RHIC, BNL, Dec. 2nd-6th, 2003.
32. Organizer, RBRC summer workshop on Current and Future directions at RHIC', BNL, August 5th-22nd, 2002.
33. Organizer, Mini-symposium on topics in perturbative QCD, BNL, May 2002.
34. Co-Chair, First EIC workshop, BNL, Feb. 28th-March 2nd, 2002.
35. Co-Convenor, ``pA sub-group of the LHC Yellow Report'', Fall 2001-Fall 2002.
36. Co--Convener with W. Ochs, QCD in multi-particle production'', ISMD 2000, Lake Balaton,

Hungary, October 9th--16th, 2000.

37. Co--organizer, eRHIC summer meeting, BNL, June 26th--July 14th, 2000, BNL Formal Report 52606.

38. Co--organizer, 2nd eRHIC workshop, Yale, April 6th--8th, 2000.

39. Co--organizer, 1st eRHIC workshop, BNL, December 3rd--4th, 1999.

40. Co--organizer, RIKEN--BNL Center Workshop on Hard parton physics in high energy nuclear collisions March 1st-5th, 1999.

41. Co--organizer, Workshop on Coherent QCD processes with nucleons and nuclei, ECT\*, Trento, August 31st - September 11th, 1998.

42. Co--organizer, 2nd INT/RHIC workshop on Electromagnetic probes of the quark--gluon plasma, Seattle, January 24th--27th, 1996.

### **Service, Committees and Grants**

co-PI (with T. Hatsuda) of JSPS Brain Circulation grant to send Japanese post-docs and students to BNL

Mentor, BNL Mentoring Program, FY2014

4th Grade Judge, BNL Science Fair, May 3rd 2014.

International Advisory Committee, Quarks in Nuclear Physics, Valparaiso, Chile, March 2015

International Advisory Committee, POETIC V, Yale Univ., Sept. 22-26, 2014

NSF Panel on Experimental Nuclear Physics (March 5-7, 2014)

Vice-Chair, APS Topical Group on Hadron Physics (2014-2015)

Editor, Annals of Physics, January 2013 -

International Advisory Committee for IS2013, Isla da Toxa, Spain September 8-13, 2013

POETIC Conference Series, Founder and member of International Advisory Committee (meetings in Cape Town, Indiana, Valparaiso, Jyvaskyla)

sPHENIX Review Committee, October 5-6, 2012

Promotion Committee, ECT\*, Trento, May 23, 2012.

Referee of Ph. D. Thesis, Indian Institute for Science, Bangalore India, October 31, 2012.

Opponent on Ph.D defense of Dr. Hans Dalsgaard, Niels Bohr Institute, Nov. 14, 2011

Opponent on Ph.D. defense of Dr. Christoffer Flensburg, Lund University, April 29, 2011

RIKEN-BNL Center (RBRC) Theory Advisory Committee (2010-)

Referee for the LHeC Conceptual Design Report, CERN (2011).

International Advisory Committee, International Conference on Physics and Astrophysics of Quark-Gluon Plasma (ICPAQGP) 2010.

Principal Investigator, LDRD Grant from Brookhaven Science Associates, October 2009-September 2012.

Senior Scientist Promotion Committee, BNL 2009-

Junior Staff Promotions Committee, BNL 2009-2012

Continuing Appointments Committee, BNL 2003 –

Tenure Committees, BNL 2003-present.

International Advisory Committee, GHP 09 Workshop, Denver, April 29th-May 1st, 2009.

APS Group on Hadron Physics Nomination Committee, 2008.

Principal Investigator, LDRD grant from BSA, Oct. 2007-Sept. 2009.

Steering Committee, Member, Electron Ion Collider Collaboration, 2006-present

Chair, Colloquium Committee, BNL, Oct.2005 – Oct. 2006.

STAR Advisory Committee on Forward Pion Detector, 2002.

Member, Physics Dept. Library Committee, October 2001-2005.

Co-Principal Investigator, Program Development Fund, Brookhaven Science Associates, Feb. 2002-2004.

Principal Investigator, LDRD grant from BSA, Oct. 1999-Oct. 2000; renewed Oct. 2000.

External member on CERN grants CERN/P/FIS/1203/1998,  
CERN/P/FIS/15196/1999, CERN/P/FIS/40108/2000, CERN/FIS/437 17/2001.

Member/Chair, BNL seminar committees, October 1999-October 2001 and October 2009-2010.

Referee for DOE and NSF Grant Proposals, Canadian NSERC, Dutch FOM, Austrian National Foundation

Referee for Phys. Rev. Lett., Nucl. Phys. A, Eur. J. Phys., Phys. Lett. B., JHEP, Phys. Rev. C&D.

### Students mentored

- i) Jefferson Bjoraker (now at BNP, New York City)
- ii) Stanislav Srednyak (Ph.D, YITP, Stony Brook)
- iii) Prithwish Tribedy (student of S. Chattopadhyay, VECC, Kolkata, India)
- iv) Daniel Fernandez-Fraile (Madrid Univ., now Humboldt Fellow, Frankfurt)
- v) Merijn Van Der Klundert (Masters student of T. Peitzmann, Ph.D student at Univ. of Antwerp)
- vi) Soeren Schlichting (student of J. Berges at Univ. of Heidelberg, Goldhaber Fellow, BNL)
- vii) Thomas Epelbaum (student of F. Gelis at CEA Saclay)
- viii) Yue Wang (undergraduate student, Tsinghua Univ., January-February, 2014)
- ix) Mark Mace (1st year Graduate Student, Stony Brook, 2014)

### Invited Lectures

1. Lectures at 2nd International Summer School, Orsay, France, July 3-4, 2014
2. Lectures at LBNL Nuclear Theory Summer School, June 10-12, 2014
3. Lectures at Schladming Winter School, Schladming, **Austria**, February 22-March 2, 2013.
4. Lectures at SERC School, VECC, Kolkata, **India**, Jan. 14-17, 2013.
5. Lectures at JET Collaboration Summer School, McGill Univ., **Canada**, June 16-18, 2012.
6. Lectures at Univ. of Cape Town, **South Africa**, February 2012.
7. Lectures at 51<sup>st</sup> Cracow School of Physics, **Poland**, June 11-19, 2011 (canceled).
8. Lectures at XIV Jorge Swieca School in Nuclear Physics, Itaipava, **Brazil**, Jan. 25<sup>th</sup> – 31<sup>st</sup>, 2009.
9. Hadronic collisions at the LHC and QCD at high density", April 2008, Les Houches, **France** (missed due to illness)
10. QGP Winter School, Jaipur, **India**, Jan. 31<sup>st</sup>-Feb. 3<sup>rd</sup>, 2008.
11. Lectures on QCD at high energies, Universidad Technico Federico Santa Maria (UTFSM), Valparaiso, **Chile**, March 20<sup>th</sup>-April 6<sup>th</sup>, 2007.
12. Lectures on Multiparticle production in QCD at high energies, at the 46<sup>th</sup> Zakopane Summer School in Physics, Zakopane, **Poland**, May 27<sup>th</sup>-June 5<sup>th</sup>, 2006.

13. Lectures on QCD Phase Transitions and RHIC Physics at the International Center for Theoretical Physics (ICTP) Summer School in Particle Physics, Trieste, **Italy**, June 13<sup>th</sup>-24<sup>th</sup>, 2005.
14. Lectures at International Graduate School, Univ.of Bielefeld, **Germany**, October 4<sup>th</sup>-10<sup>th</sup>, 2004.
15. Lecture on the Color Glass Condensate at CTEQ summer school, **Madison**, WI, June 22<sup>nd</sup>-30<sup>th</sup>, 2004.
16. Lectures on the Color Glass Condensate and RHIC physics at Hampton University Graduate School (**HUGS**), June 9<sup>th</sup>-11<sup>th</sup>, 2004.
17. Three Lectures on the Color Glass Condensate, at Joint meeting of IX Hadrons 2004 and VII RANP, Angra Dos Reis, **Brasil**, March 28<sup>th</sup>- April 3<sup>rd</sup>, 2004.
18. QCD and heavy ion collisions, Graduate Student lecture, Quark Matter 2004, **Oakland**, Jan. 11<sup>th</sup>-17<sup>th</sup>, 2004.
19. High Energy Nuclear Physics in the Collider Era', National Nuclear Physics Summer School, **Knoxville**, TN, June 2003.
20. Small x physics in QCD, Summer School on QCD theory and RHIC Physics, Shandong Univ.,Jinan, **China**, June 2002.
21. Initial conditions in heavy ion collisions, Cargese Summer School in physics, Corsica, **France**, August 2001.
22. Physics of Relativistic Nuclear Collisions, a course taught jointly D. Kharzeev, M. Prakash, J. Schaffner-Bielich, **Stony Brook**, Fall 2000.
23. Lectures on Scattering in high energy QCD, at the XXXIX Cracow school of theoretical physics, Zakopane, **Poland**, May 29<sup>th</sup>--June 8<sup>th</sup>, 1999.
24. Light cone field theory and high energy scattering, 11<sup>th</sup> Chris Engelbrecht summer school in theoretical physics, Cape Town, **South Africa**, February 4<sup>th</sup>--13<sup>th</sup>, 1998.
25. Lectures at ``Jyvaskyla International Summer School'', Jyvaskyla, **Finland**, August 1<sup>st</sup>--15<sup>th</sup>, 1997.

### **Invited talks and seminars (since Fall 1998)**

#### **2014**

Nuclear Colloquium, Univ. of Frankfurt, July 10, 2014

Seminar, Tech. Univ. Darmstadt, July 1, 2014 (scheduled)

Seminar, Univ. of Heidelberg, June 26, 2014 (scheduled)

Invited (parallel) talk, Quark Matter 2014, May 19-23, 2014 (scheduled)

Seminar Ohio State Univ., April 25, 2014

Colloquium, Kent State Univ., April 24, 2014

Colloquium, Texas A&M University, April 10, 2014

Invited talk, Winter Workshop on Nuclear Dynamics, April 7-11, 2014

Nuclear Theory Seminar, Univ. of Washington, March 19, 2014

Invited talk, Simons Center workshop on Strongly Coupled Systems Off-Equilibrium, Feb. 24-28, 2014

Colloquium, Vanderbilt University, February 6, 2014

## **2013**

Invited talk, Symposium, 28th Nishinomiya-Yukawa Memorial International Workshop on New Frontiers in QCD, Kyoto, December 2-6, 2013

Invited talk, Gerry Brown memorial workshop, November 24-26, 2013.

Colloquium, Purdue University, October 25, 2014

Plenary talk, IS2013, Isla da Toxa, Spain, Sept. 9<sup>th</sup>-13<sup>th</sup>, 2013

Invited talk, POETIC IV, Jyvaskyla, Sept. 2<sup>nd</sup> -5<sup>th</sup>, 2013

Talk, program on QCD Landscape of Nucleons and Nuclei, LBNL, Sept. 12-16, 2013

Talk to 5<sup>th</sup> and 6<sup>th</sup> grade students, Raynor Country Day School, Westhampton, NY, May 31, 2013

Opening talk, MIT pA workshop, May 17-18, 2013

Invited talk, Trento pA workshop, May 6-10, 2013

Seminar, Purdue Univ., May 2, 2013

Invited talk, RBRC jet quenching workshop, BNL, April 15-17, 2013

Colloquium, Jefferson lab, April 3, 2013

Colloquium, Old Dominion University, April 2, 2013

Seminar, Jefferson Lab, April 1, 2013

Talk at “Brain Circulation” workshop, BNL, March 21, 2013

Invited talk, POETIC III, Valparaiso, Chile, March 4-8, 2013

Seminar, Yale University, February 1, 2013

Institute Colloquium, NISER, Bhubaneshwar India, January 19, 2013

Invited talk, Joint BNL-LANL-RBRC workshop on pA physics at RHIC, January 7-9, 2013

## **2012**

Seminar, Jefferson Lab, December 17, 2012.

Seminar, Univ. of Minnesota, December 12, 2012.

Colloquium, Rice University, Houston, November 28, 2012

Seminar, Beijing University, Beijing, China, Nov. 5, 2012 (canceled)

Invited talk, Workshop on Frontiers in QCD, Shanghai, Nov. 2-4, 2012 (canceled)

Heavy Ion Theory Review talk, LHC Week in Split, Croatia, September 30-October 6, 2012.

Invited talk, ISMD 2012, Kielce, Poland, Sept. 17-21, 2012.

Invited Parallel Session talk, Quark Matter 2012, Washington DC, August 13-18, 2012.

Invited talk, Kapusta Fest, McGill Univ., Montreal, Canada, June 12-14, 2012.

Invited talk, Ridge Workshop, INT Seattle, May 3-7, 2012.

Plenary talk, Quarks in Nuclear Physics Conference, Paris, France, April 16-20, 2012.

Invited talk, APS meeting, Atlanta, April 2, 2012.

Seminar, Indiana University, March 2, 2012

Invited talk, African Institute for Mathematical Sciences, Cape Town, South Africa, February 16, 2012.

Colloquium, University of Cape Town, February 15, 2012.

Invited talk, EIC workshop, STIAS, Stellenbosch Univ., South Africa, February 2, 2012

Colloquium, Iowa State University, January 21, 2012.

Plenary talk, HEP 2012, Valparaiso, Chile, January 4-10, 2012.

## **2011**

Seminar, Stony Brook University, December 22, 2011

Invited talk(s), EMMI Taskforce on Thermalization workshop, Heidelberg, December 12-14, 2011

Plenary talk, PHENIX collaboration meeting, December 6, 2011

Seminar, Washington Univ., St. Louis, Nov. 17, 2011

Invited talk, HIT: Experiment meets theory workshop, Discovery Center, NBI, Copenhagen, Nov. 7-9, 2011

Invited talk, Galileo Galilei Institute, Firenze, Italy, October 11, 2011

HIT Seminar, LBNL, Sept. 20<sup>th</sup>, 2011.

Plenary talk, symposium on future directions at RHIC, AGS-Users meeting, June 20-24, 2011

Invited talk, Workshop on High Energy QCD, ECT\*, Trento, May 30-June 2, 2011

Parallel session talk, QM2011, Annecy, May 23-28, 2011

Invited talk, Drell-Yan workshop, BNL, May 11-13, 2011

Theoretical Physics seminar, Lund University, April 28, 2011

Discovery Center Seminar, NBI Copenhagen, April 27, 2011

Invited talk, (Pre-DIS) Jlab workshop on Factorization, Newport News, April 8-9, 2011

Dutch National Seminar in Theoretical Physics/NIKHEF colloquium, Amsterdam, March 25, 2011

Invited talk, STAR analysis meeting, BNL, March 16, 2011

Invited talk, EIC meeting, BNL, March 10, 2011

High Energy Physics Seminar, Univ. of Pennsylvania, Philadelphia, March 1, 2011

Colloquium, Temple University, Philadelphia, February 28, 2011

Invited talk, Aspen Winter Workshop on New Discoveries at the LHC, Aspen, February 12-18, 2011

INPP Seminar, Ohio University, Athens, OH, January 18, 2011

## **2010**

Physics Colloquium, BNL, December 7, 2010

Seminar, Nuclear Theory Group, Stony Brook, Nov. 4<sup>th</sup>, 2010.

Invited talk, RBRC review, BNL, October 27-28, 2010

Physics Colloquium, College of William & Mary, Williamsburg, October 22, 2010.

Plenary Lecture, NYSAPS Section Meeting, Hofstra Univ., October 15, 2010.

Plenary talk, 35<sup>th</sup> International Conference on High Energy Physics, ICHEP2010, Paris, July 22<sup>nd</sup>-28<sup>th</sup>, 2010.

Plenary Lecture, INT 20<sup>th</sup> anniversary Symposium, July 1-2, 2010.

Invited talk, Can. Assoc. Physicists, Toronto, June 7-10, 2010 (cancelled)

Plenary Lecture, 90-50-10 Symposium, BNL, June 10-11, 2010.

Invited talk, AGS Users meeting, June 7<sup>th</sup>, 2010.

Invited talk, CP3 workshop on Origins of Mass, Odense, Denmark, May 3-7, 2010.

Seminar, Univ. of Wisconsin, April 29, 2010.

Colloquium, Florida Intl. Univ., April 2, 2010.

Colloquium, Texas A&M, Commerce, March 25, 2010 .

Seminar, Univ. of Virginia, March 17, 2010.

Plenary Talk, Inaugural Workshop, LHC Discovery Center, Copenhagen, January 21-22, 2010.

Seminar, Lund Univ., Sweden, January 19, 2010

Invited talk, 26<sup>th</sup> Winter Workshop on Nuclear Dynamics, Ochos Rios, Jamaica, January 2-9, 2010.

## **2009**

Plenary Talk, CATHIE-TECHQM workshop, BNL, Dec. 14th-18th, 2009.

Graduate Student lecture, SUNY Stony Brook, Nov. 20th, 2009.

Invited talk, EICAC Advisory Committee meeting, Jlab, November 1st-2nd, 2009.

Invited talk, International Symposium From Particles and Partons to Nuclei and Fields, in honor of A.H. Mueller, Columbia Univ. October 23rd-25th, 2009.

Invited talk, APS/JPS DNP meeting, Hawaii, October 13th-17th 2009.

Invited talk, Small x meeting, Ischia, Italy, September 9th-13th, 2009.

Plenary talk, STAR Analysis Workshop, July 9th, 2009.

Seminar, Univ. of Connecticut, Storrs, July 7th, 2009.

Invited talk, RHIC AGS Users meeting, BNL, June 2nd, 2009.

Invited talk, Parallel session, Sakharov Int. Conf. May 18th-23rd, 2009.

Plenary Talk, 4th Sakharov International Conference, Moscow, May 18th- 23rd, 2009.

Seminar, Paris VI (Jussieu), April 29th, 2009.

Invited (Parallel session) Talk, Quark Matter, March 29th-April 4th, 2009.

Seminar, McGill University, Montreal, March 24th, 2009.

Seminar, Heavy Ion Tea, LBL, February 10th, 2009.

Seminar extraordinario, Federal University, Rio De Janeiro, Brasil, February 2nd, 2009.

## **2008**

Seminar, Penn State, Nov. 5th, 2008.

Invited talk, Ridge Workshop, BNL, Sept. 22nd-24th, 2008.

Opening talk, Program on Initial Conditions: QCD at high parton densities, International Center, Dona Paula, Goa, India, Sept. 1st, 2008.

Invited Talk, Light Cone 2008, Mulhouse, France, July 7th-11th, 2008.

Invited Talk, AGS/RHIC users meeting, BNL, May 27th, 2008.

Plenary Talk, 4th Electron Ion Collider Workshop, Hampton Univ., May 23rd, 2008.

Invited Talk, 6th Int. Conf. on Perspectives in Hadronic Physics, Trieste, May 12th-16th, 2008.

Invited Talk, RBRC workshop on Hydrodynamics, April 28th, 2008.

Colloquium, George Washington U., April 10th, 2008.

Invited Talk, NFQCD08 workshop, Yukawa Institute, Kyoto, March 13th, 2008.

Discussion Leader, NFQCD08 Symposium, Kyoto, March 4th-7th, 2008.

Invited Talk, workshop on Hot & Dense Matter in the RHIC and LHC era, TIFR, Mumbai, Feb. 12th-14th, 2008.

Plenary Topical Overview Talk, Quark Matter 2008, Jaipur, India, Feb. 4th- 10th, 2008.

Nuclear Theory Seminar, Stony Brook, January 24th, 2008.

## **2007**

TH-Seminar, CERN, Nov. 2nd, 2007.

Invited talk, Gordon Conference, July 14th-20th, 2007.

JLAB Seminar, May 14th, 2007.

Plenary talk, DIS 2007 April 16th-20th, 2007.

Heavy Ion Tea Seminar, LBNL, March 12th, 2007.

Seminar, Galileo Galilei Institute, Florence, February 28th, 2007.

Invited talk, Town Hall meeting on Phases of QCD Matter, January 12th- 14th, (2007).

## **2006**

Summary of theory talks at QM2006, BNL, Nov. 30th, 2006.

Invited Parallel session talk, Quark Matter 2006, Shanghai, Nov. 14th-20th, 2006

Seminars, Univ. of Maryland & George Washington U, Nov. 1st -2nd, 2006.

Seminar at U. Conn., October 23rd, 2006.

RBRC Seminar, BNL, October 12th, 2006.

Invited talk, INT workshop on Quark Gluon Plasma Thermalization, Seattle, September 26th-30th, 2006.

Talk at BNL PAC, September 13th, 2006.

Talk at Workshop on Future Prospects in QCD, July 17th-21st, 2006.

Keynote Talk, STAR collaboration meeting, MIT, July 12th, 2006.

Plenary talk, Hard Probes 2006, Asilomar, June 9th-16th, 2006.

Invited Talk, AGS Users meeting, BNL, June 5th-9th, 2006.

Colloquium, Oak Ridge National Lab, May 25th, 2006.

Invited talk, APS Dallas Meeting, April 23rd, 2006.

Seminar, McGill Univ., April 12th, 2006.

Seminar, Univ. of New Hampshire, March 29th, 2006.

Colloquium, Univ. of New Hampshire, March 27th, 2006

Talk, BNL PAC, March 23rd, 2006.

Colloquium, Theory Division, Saclay, February 28th, 2006.

Talk, QCD in nuclei Discussion group, BNL, January 13th, 2006.

## **2005**

Invited talk, RBRC Symposium, Dec. 15th, 2005.

Invited talk, RBRC workshop on Heavy Flavor Production, Dec. 12th-14th, 2005.

Seminar, Wayne State University, Dec. 9th, 2005.

Invited talk, LHC Satellite Meeting, PANIC, Santa Fe, Oct. 22nd, 2005.

Invited talk, RBRC workshop on the Odderon, Sept. 27th-29th, 2005.

Colloquium, Theory Division, CERN, May 25th, 2005.

Plenary Talk, XX Blois Conference on Elastic & Diffractive Scattering, May 15th-19th, 2005.

Seminar, Theoretical Physics Dept., University of Florence, May 9th, 2005.

Seminar, Theory Group, University of Milano, May 2nd, 2005.

Invited Talk, HERA-LHC workshop, DESY, March 21st-23rd, 2005. DESY Theory Seminar, February 23rd, 2005.

Plenary talk, International Conference on Physics and Astrophysics of the Quark-Gluon Plasma, February 8th-12th, 2005, Kolkata, India.

Physics department Colloquium, University of Arizona, January 21st, 2005.

Nuclear Theory Seminar, University of Arizona, January 20th, 2005.

Nuclear Theory Seminar, Julich, January 13th, 2005.

## **2004**

Colloquium, Institute of Mathematical Sciences, Chennai, India, December 6th, 2004.

Plenary talk, DAE-HEP Symposium, Kolkata, India, Nov. 29th-December 3rd, 2004.

Invited talk, Conference on Teraflop Computing, Bielefeld Univ., Nov. 21st- 25th, 2004.

Seminar, Frankfurt Univ., Nov. 18th, 2004.

Plenary talk, Hard Probes 2004, Ericeira, Portugal, Nov. 4th-10th, 2004.

Theoretical Particle Physics seminar, Oxford Univ., October 22nd, 2004.

Particle Physics seminar, Orsay, September 21st, 2004.

Plenary talk, Conference on QCD at Cosmic Energies, Erice, August 29th- September 5th, 2004.

Invited talk, NSAC meeting on high energy nuclear physics, BNL, June 2nd- 5th, 2004.

RIKEN lunch seminar, BNL, May 27th, 2004.

Seminar, Case Western Reserve Univ., April 20th, 2004.

Seminar, Federal Univ., Rio de Janeiro, March 26th, 2004.

Invited talk, STAR collaboration meeting, Feb. 17th, 2004.

Invited parallel session talk, QM2004, Jan.11th-17th, 2004.

## **2003**

Invited talk, RHIC II planning meeting, BNL, Dec. 3rd, 2003.

Colloquium, UNAM, National Univ. of Mexico, Mexico City, Nov. 5th, 2003.

Nuclear Theory Seminar, Indiana Univ., Oct. 24th, 2003.

Particle Physics Seminar, Columbia Univ., Oct. 20th, 2003.

Invited Talk, Heavy Ion meeting, Faro, Portugal, October 10th-11th, 2003.

Seminar, McGill Univ., Montreal, Canada, Sept. 17th, 2003.

Invited Talk, HIC03, Montreal, Canada, June 25th-28th, 2003.

Invited Talk, Low x Workshop, Nafplio, Greece, June 4th-7th, 2003.

Invited Talk, NAPP2003, Dubrovnik, Croatia, May 26th-30th, 2003.

Plenary Talk, RHIC-AGS Users Meeting, May 15th-16th, 2003.

Seminar and Lecture, UCLA, April 8th, 2003.

Invited Talk, INT Program on the First Three Years of RHIC Physics, INT, Seattle, March 30th-April 7th, 2003.

T-8 Seminar, Los Alamos, Feb. 7th, 2003.

## **2002**

CNS Seminar, Kent State, Nov. 19th, 2002.

Seminar, Yukawa Institute, Kyoto Univ., Nov. 8th, 2002.

Kanto Hadron Seminar, Univ. of Tokyo, Nov. 7th, 2002.

Invited Talk, WS02/CNS Workshop, RIKEN, Japan, Nov. 5-6th, 2002.

Invited talk, ECT\* Workshop on Coherent Effects at RHIC and LHC, Trento, Italy, October 14th-19th, 2002.

Seminar, UERJ, Rio De Janeiro, Sept. 10th, 2002.

Seminar, Institute for Theoretical Physics, Univ. of Sao Paulo, Sao Paulo, Brazil, Sept. 5th, 2002.

Plenary talk, XXV Brazilian National Nuclear Physics Conference (RTFNB), Sao Pedro, Brazil, August 30th-Sept. 4th, 2002.

Invited talk, Conference on RHIC Physics, Wuhan, China, June 17th-18th, 2002.

Invited talk, STAR collaboration meeting, Berkeley, May 3rd-5th, 2002.

Invited talk, Workshop at ITP Santa Barbara, April 8th-12th, 2002.

Colloquium, Univ. of Illinois Chicago, March 2002.

## **2001**

Invited talk, Workshop on future of lepton-hadron colliders, Durham, UK, December 6th-7th, 2001.

Seminar, SUNY Stony Brook, November 15th, 2001.

Seminar, Univ. of Maryland, November 9th, 2001.

Seminar, Univ. of Virginia, November 7th, 2001.

Invited talk, DNP meeting, Hawaii, October 16th-20th, 2001.

Seminar, MIT, October 9th, 2001.

Invited talk, International Conference on the physics of the Quark Gluon Plasma Ecole Polytechnique, France, September 3rd-7th, 2001.

Invited talk, Statistical QCD, Bielefeld, Germany, August 26th-30th, 2001.

Invited talk, Gordon Conference on QCD at high T, high mu and small x, Newport, July 22nd-27th, 2001.

Invited talk, ThermalFest, BNL, July 20th-21st, 2001. Seminar at McGill University, April 26th, 2001.

Seminar at Ohio State University, April 16th, 2001.

Colloquium at Iowa State University, April 9th, 2001.

Invited talk at Workshop on Lepton scattering, Hadrons, and QCD, March 26th-April 6th, 2001, Adelaide, Australia.

Plenary talk, Quark Matter 2001, Stony Brook, January 15th-19th, 2001.

## **2000**

Plenary talk at DNP meeting, Williamsburg, October 2000.

Plenary talk at EPIC workshop, MIT, September 14th--16th, 2000.

Invited talk, LBNL summer workshop, August 31st, 2000.

Seminars at Munich, Heidelberg, and Frankfurt universities, August 1st-11th, 2000.

Invited talk, workshop on QCD in a nuclear environment, Regensburg, August 3rd-5th, 2000.

Invited talk, RBRC workshop on Phase Transitions and Cosmology, BNL, July 17th-28th, 2000.

Nuclear Theory Seminar at Argonne National Lab, May 18th, 2000.

Departmental Colloquium, BNL, April 18th, 2000.

Plenary talk, Yale eRHIC workshop, April 6th-8th, 2000.

Plenary talk, workshop on High Energy Physics Phenomenology, Chennai, India, January 4th--13th, 2000.

## **1999**

Invited talk, INT workshop on Non--equilibrium dynamics, Seattle, November 23rd, 1999.

RHIC primer series lecture, BNL, October 25th, 1999.

RIKEN lunch seminar, October 8th, 1999.

High Energy Seminar at Penn State Univ., September 28th, 1999.

Invited talk at workshop on RHIC computing, September 2nd, 1999, BNL.

Invited talk, International conference on Multiparticle Dynamics, Brown Univ., August 9th--13th, 1999.

RHIC primer series lecture, BNL, July 26th, 1999.

Invited talk, RIKEN-BNL workshop on OSCAR, July 15th, 1999.

Invited talk, DESY workshop on eA physics, Hamburg, May 24th-26th, 1999.

RIKEN Lunch seminar, BNL, March 18th, 1999.

Triangle Colloquium, Duke Univ., April 6th, 1999.

Seminar, Univ. of Connecticut, February 23rd, 1999.

Colloquium, Ohio State University, February 8th, 1999.

Seminar, SUNY Stony Brook, January 1999.

## **1998**

Colloquium, Univ. of Illinois (Chicago), November 1998.

Invited talk, Recontres du Moriond, March 20th-27th, 1999.

Invited talk, III INT/RHIC winter workshop, LBNL, January 7th-9th, 1999.

Invited talk, VIII Mexican school of particles and fields, November 20th- 28th, 1998.

Invited talk, RIKEN-BNL workshop on In and out of Equilibrium, October 26th-30th, 1998.

Seminar, MIT, October 1998.