

CURRICULUM VITAE

Name : Ashoke Sen

Birth : July, 1956

Field of Specialisation : High Energy Physics

Designation : Professor

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Academic records : B.Sc. (Physics)
Calcutta University (1975)

M.Sc. (Physics)
I.I.T. Kanpur (1978)

Ph.D. (Physics)
SUNY at Stony Brook (1982)

Post-doctoral fellowships : October 1982 - July 1985
Fermilab, USA

August 1985 - February 1988
SLAC (USA)

Other positions held : March 1988 - September 1997
Tata Institute of Fundamental Research

Fellowships of Academies : Fellow, Indian Academy of Sciences,
(national) elected 1991

Fellow, Indian National Science Academy,
elected 1995

Fellow, National Academy of Sciences, India,
elected 1997

Fellowships of Academies : Fellow, Royal Society, London
(international) elected 1998

Fellow, Third World Academy of Sciences
elected 2004

Awards (national) : 1994 S. S. Bhatnagar award
1995 B.M. Birla Science Prize
1996 G.D. Birla award
1998 R.D. Birla award
2001 Padmashri
2001 Kamal Kumari National award
2004 INSA S.N.Bose Award lecture
2005 H.K. Firodia award
2006 J C Bose Fellowship, DST, Govt of India
2009 Infosys prize
2013 Padma Bhushan
2013 M P Birla award

Awards (international) : 1989 ICTP prize in honour of H. Yukawa
1997 Third World Academy of Sciences Prize
2006 Pius IX Gold Medal
2012 Fundamental Physics Prize
2014 Dirac Medal (ICTP)

Honourary degrees : D.Sc., University of Calcutta
D.Sc., Indian Institute of Technology, Kharagpur

D.Sc., Bengal Engineering and Science University, Shibpur

D.Sc., Panjab University

D.Sc., Indian Institute of Technology, Kanpur

D.Sc., Indian Institute of Technology, Bombay

D.Litt., Jadavpur University

D.Sc., IISER, Kolkata

D.Sc., Shiv Nadar University, Delhi

Distinguished lectures and visits (international)

- Rothschild Visiting Professor, Feb.-March, 1997 and June 21 - July 20, 2002, Isaac Newton Institute, Cambridge, U.K.
- Morris Loeb Lecturer, April 17-27, 2000, Harvard University, Cambridge, USA
- Walter a. Eva Andrejewski foundation Lecturer, Humboldt University, Berlin, Germany, Mar 4-10, 2002
- James H. Simons lecturer, April 29 - May 10, 2002, SUNY at Stony Brook, New York, USA
- PIMS distinguished chair at the University of British Columbia, The Pacific Institute for the Mathematical Sciences, August 2003
- Dirac lecture, June 20, 2005, DAMTP, Cambridge University, UK
- Morningstar visiting Professor, 2004, 2005, 2007 MIT, Cambridge, USA
- Einstein Colloquium, December 2005, Weizmann Institute, Israel.
- Stanford Institute For Theoretical Physics distinguished lecturer, May 2006.
- Moore Scholar, Caltech, February-March, 2007.

- JC Bose memorial lecture, Royal Society, London, June 11, 2007.
- Blaise Pascal chair, Univ. of Pierre and Marie Curie, Paris, September 2009 - September 2010
- KIAS scholar, KIAS, Seoul, May-June, 2013
- Distinguished Professor, KIAS, Seoul, May-June, 2015.

Distinguished lectures and visits (national)

- Saha memorial lecture, November 23, 1998, Saha Institute of Nuclear Physics, Kolkata, India
- Subhashis Nag memorial lecture, December 29, 2003, Institute of Mathematical Sciences, Chennai, India
- Acharya J. C. Bose memorial lecture, November 30, 2004, Bose Institute, Kolkata
- S N Bose Memorial Lecture, S N Bose Center for Basis Sciences, Kolkata, December 29, 2008
- Chandrasekhar lecture, ICTS, TIFR, Mumbai, August 10, 2009

Invited talks at conferences and schools

1. Monopole '83, 6-9 Oct 1983, Ann Arbor, Michigan, USA
2. Workshop On Unified String Theories, 29 Jul - 16 Aug 1985, Santa Barbara, USA
3. Summer Workshop On High-Energy Physics And Cosmology, 30 Jun - 15 Aug 1986, Trieste, Italy
4. International Workshop On Superstrings, Composite Structures And Cosmology, 11-18 Mar 1987, College Park, Maryland, USA
5. CCAST Symposium / Workshop On Fields, Strings And Quantum Gravity, 29 May - 10 Jun 1989, Beijing, China
6. Workshop On Superstrings, 12-14 Jul 1989, Trieste, Italy
7. 5th SERC School on High Energy Physics, November - December 1989, Indian Institute of Technology, Kanpur, India

8. International Colloquium On Modern Quantum Field Theory, 8-14 Jan 1990, Bombay, India
9. 25th International Conference On High-Energy Physics (ICHEP 90), 2-8 Aug 1990, Singapore, Singapore
10. Summer School In High-Energy Physics And Cosmology, 18 Jun - 28 Jul 1990, Trieste, Italy
11. Strings And Symmetries 1991, 20-25 May 1991, Stony Brook, New York, USA
12. Trieste Summer School In High-Energy Physics And Cosmology, 17 Jun - 9 Aug 1991, Trieste, Italy
13. International Conference On Gravitation And Cosmology (ICGC 91), 12-18 Dec 1991, Ahmedabad, India
14. 7th SERC School on High Energy Physics, December 1991, Physical Research Laboratory, Ahmedabad, India
15. Workshop on string theory, 8-19 Apr 1992, Trieste, Italy
16. 16th Johns Hopkins Workshop On Current Problems In Particle Theory, 8-10 Jun 1992, Goteborg, Sweden
17. Trieste Summer School on High-Energy Physics and Cosmology, 15 Jun - 14 Aug 1992, Trieste, Italy
18. Meeting On Bose And 20th Century Physics, 30 Dec 1993 - 5 Jan 1994, Calcutta, India
19. Silver Jubilee Conference Of The Indian Association For General Relativity And Gravitation, 14-18 Feb 1994, Pune, India
20. ICTP Summer School In High-Energy Physics And Cosmology, 13 Jun - 29 Jul 1994, Trieste, Italy
21. 11th DAE Symposium On High-Energy Physics, 28 Dec 1994 - 2 Jan 1995, Shantiniketan, India
22. STRINGS 95: Future Perspectives In String Theory, 13-18 Mar 1995, Los Angeles, California, USA

23. ICTP Spring School On String Theory, Gauge Theory And Quantum Gravity, 27 Mar - 4 Apr 1995, Trieste, Italy
24. International Workshop On Supersymmetry And Unification Of Fundamental Interactions (SUSY 95), 15-19 May 1995, Palaiseau, France
25. ICTP Trieste Conference On S-Duality And Mirror Symmetry, 12-23 Jun 1995, Trieste, Italy
26. Frontiers In Quantum Field Theory In Honor Of The 60th Birthday Of Prof. K. Kikkawa, 14-17 Dec 1995, Toyonaka, Japan
27. 4th International Conference On Supersymmetries In Physics (SUSY 96), 29 May - 1 Jun 1996, College Park, Maryland, USA
28. ICTP Summer School In High-Energy Physics And Cosmology, 10 Jun - 26 Jul 1996, Trieste, Italy
29. European Research Conference On Advanced Quantum Field Theory In Memory Of Claude Itzykson, 31 Aug - 5 Sep 1996, La Londe Les Maures, France
30. Workshop On Frontiers In Field Theory, Quantum Gravity And String Theory, 12-21 Dec 1996, Puri, India
31. 4th Jerusalem Winter School In Theoretical Physics On Dualities And Symmetries, 30 Dec 1996 - 8 Jan 1997, Jerusalem, Israel
32. Duality Symmetries in String Theory II, April 97, ICTP, Trieste, Italy
33. Strings 97 Meeting, 16-21 Jun 1997, Amsterdam, The Netherlands
34. 8th Marcel Grossmann Meeting On Recent Developments In Theoretical And Experimental General Relativity, Gravitation And Relativistic Field Theories (MG 8), 22-27 Jun 1997, Jerusalem, Israel
35. 13th SERC School on High Energy Physics, Feb 10 - Mar 3 98, Santiniketan, India
36. Strings 98, 22-27 Jun 1998, Santa Barbara, California, USA
37. 29th International Conference On High-Energy Physics (ICHEP 98), 23-29 Jul 1998, Vancouver, British Columbia, Canada

38. 22nd Johns Hopkins Workshop On Novelities Of String Theory, 20-22 Aug 1998, Goteborg, Sweden
39. Strings 99, 19-25 Jul 1999, Potsdam, Germany
40. NATO Advanced Study Institute: TMR Summer School On Progress In String Theory And M-Theory (Cargese 99), 24 May - 5 Jun 1999, Cargese, Corsica, France
41. Advanced School On Supersymmetry In The Theories Of Fields, Strings And Branes, 26-31 Jul 1999, Santiago de Compostela, Spain
42. String Theory at the Millenium, Jan.12-15, 2000, Caltech, USA
43. Lennyfest, May 20-21, 2000, Stanford, USA.
44. 18th International Symposium On Lattice Field Theory (Lattice 2000), 17-22 Aug 2000, Bangalore, India
45. 14th DAE Symposium On High-Energy Physics, 18-22 Dec 2000, Hyderabad, India
46. Strings 2001: International Conference, 5-10 Jan 2001, Mumbai, India
47. 16th SERC School On Theoretical High-Energy Physics, 25 Feb - 16 Mar 2001, Allahabad, India
48. 8th International Symposium On Particle Strings And Cosmology (PASCOS 2001), 10-15 Apr 2001, Chapel Hill, North Carolina, USA
49. Avatars of M-Theory, June 5-8, 2001, ITP Santa Barbara, USA
50. The Duality Workshop: A Math/Physics Collaboration, June 18 - July 13, 2001, ITP, Santa Barbara, USA
51. Les Houches Summer School: Session 76: Euro Summer School On Unity Of Fundamental Physics: Gravity, Gauge Theory And Strings, 30 Jul - 31 Aug 2001, Les Houches, France
52. JHS/60, Nov.3-4, 2001, Caltech, USA
53. Supergravity At 25, 1-2 Dec 2001, Stony Brook, New York, USA
54. 14th Chris Engelbrecht Summer School In Theoretical Physics: Quantum Gravity, String Theory And Cosmology, 23 Jan - 1 Feb 2002, Stellenbosch, South Africa

55. DPF 2002: The Meeting Of The Division Of Particles And Fields Of The American Physical Society, 24-28 May 2002, Williamsburg, Virginia, USA
56. Strings 2002, 15-20 Jul 2002, Cambridge, England
57. International Conference On Theoretical Physics (TH 2002), 22-26 Jul 2002, Paris, France
58. 17th Nishinomiya-Yukawa Memorial Symposium: String Theory, 12-13 Nov 2002, Nishinomiya, Japan
59. 9th International Symposium On Particles, Strings And Cosmology (PASCOS 03), 3-8 Jan 2003, Mumbai (Bombay) India
60. ICTP Spring School On Superstring Theory And Related Topics, 31 Mar - 8 Apr 2003, Trieste, Italy
61. Theoretical Advanced Study Institute In Elementary Particle Physics (TASI 2003): Recent Trends In String Theory, 1-27 Jun 2003, Boulder, Colorado, USA
62. Strings 2003, 6-11 Jul 2003, Kyoto, Japan
63. Summer School On Strings, Gravity And Cosmology: 14-25 Jul 2003, Vancouver, BC, Canada
64. Nobel Symposium 2003: Cosmology And String Theory, 14-19 Aug 2003, Sigtunas-tiftelsen, Sweden
65. IPM String School And Workshop 2003, 29 Sep - 9 Oct 2003, Caspian Sea, Iran
66. 3rd ICTP Latin American String School (LASS 2003), 1-19 Dec 2003, Sao Paulo, Brazil
67. Spring School on Superstring Theory and Related Topics, 15-23 Mar 2004, Trieste, Italy
68. 18th Nordic String Meeting, May 13 to May 15, 2004, Groningen, The Netherlands
69. Onassis Lectures In Physics: Fields And Strings, 5-9 July 2004, Heraklion, Greece
70. Annual International Conference On Strings, Theory And Applications (Strings 2004), 28 Jun - Jul 2, 2004, Paris, France

71. Fourth Regional Conference of the Physics Academy of the North East(PANE), November 2004, Shilchar, India
72. International Workshop On String Theory (ISM04), 15-23 Dec 2004, Khajuraho, India
73. IPM String School and Workshop (ISS2005), 5-14 Jan 2005, Qeshm Island, Iran
74. ICTP Spring School On Superstring Theory And Related Topics, 14-22 Mar 2005, Trieste, Italy
75. Summer School on Strings, Gravity and Cosmology, Perimeter Institute, June 20 - July 8, 2005, Waterloo, Ontario, Canada
76. Strings 05 Conference, Fields Institute, July 11-16, 2005, Toronto, Canada
77. Workshop On Einstein's Legacy In The New Millennium, 15-22 Dec 2005, Tohsali Sands, Puri, India
78. 23rd Winter School In Theoretical Physics: String Theory: Symmetries And Dynamics, 28 Dec 2005 - 6 Jan 2006, Jerusalem, Israel
79. 12th Regional Conference on Mathematical Physics, 27 Mar - 1 Apr 2006, Islamabad, Pakistan
80. IPM String School And Workshop (ISS2006), 10-19 Apr 2006, Tehran, Iran
81. Strings 2006, 18-24 June, Beijing, China
82. 1st Asian String School, Seoul, Korea, January 8-19, 2007.
83. Prestrings 2007, Granada, June 18-22, 2007.
84. Strings 2007, Madrid, June 25-29, 2007.
85. Eurostrings 2007, Crete, July 1-7, 2007.
86. Indian String Meeting 2007, October 15 - October 19, 2007, Allahabad, India.
87. 30 Years of Mathematical Methods in High Energy Physics, March 17-19, 2008 RIMS, Kyoto, Japan.

88. Spring School On Superstring Theory And Related Topics, 27 Mar - 4 Apr 2008, Trieste, Italy.
89. IPM string school, Isfahan, Iran, April 9-17, 2008.
90. Cargese Summer School, June 16 to June 28, 2008, Cargese, France
91. Eurostrings 2008, June 30 - July 4, 2008
92. Prestrings 2008, Zurich, 11-15 August, 2008.
93. Strings 2008, CERN Geneva, 18-23 August, 2008.
94. Indian Strings Meeting 2008, Pondicherry, Dec. 6-13, 2008
95. IISc Centenary conference, December 13-16, 2008, Bangalore, India.
96. IPM string school, April 9-18, 2009.
97. 4th School On Attractor Mechanism: SAM 2009, 29 Jun - 3 Jul 2009, Frascati, Italy.
98. Strings 2009, 22-26 Jun 2009, Rome, Italy.
99. PASCOS 2009, 6-10 Jul 2009, Hamburg, Germany.
100. 12th Marcel Grossmann Meeting On General Relativity (MG 12), 12-18 Jul 2009, Paris, France.
101. ICTS Inaugural Conference, Bangalore, 27-31 Dec, 2009
102. CERN Winter School on Supergravity, Strings, and Gauge Theory, 25-29 January 2010 CERN
103. Iberian Strings 2010, 10-12 Feb 2010, Porto, Portugal.
104. XXII Workshop Beyond the Standard Model, Bad Honnef, March 8 - 11, 2010
105. Strings 2010, 15-19 Mar 2010, College Station, Texas.
106. Solvay Workshop on Symmetries and dualities in gravitational theories, Brussels, May 19-21, 2010

107. 40th International Symposium Ahrenshoop on the Theory of Elementary Particles, Berlin August 23 - 27, 2010.
108. String Theory: Formal Developments and Applications, Cargese, June 21 - July 3, 2010
109. ICHEP 2010, Paris, July 22 to July 28, 2010.
110. Advanced String School, Puri, Oct 4-10, 2010
111. Indian Strings Meeting, Puri, January 2011
112. QFT 2011, Pune, February 2011
113. School & Conference on Modular Forms and Mock Modular Forms, ICTP, Trieste, Feb-Mar 2011
114. Sixth regional meeting in string theory, Milos, Greece, June 2011
115. Strings 2011, Uppsala, Sweden, June 2011
116. 25th Solvay Conference on Physics, Brusses, Belgium, October 2011
117. Asian Winter School on Strings, Particles and Cosmology, Japan, January 2012
118. String Theory: Holography and its application, Jerusalem, Israel, February 2012
119. ICTP Spring School, Trieste, Italy, March 2012
120. N=4 Super Yang Mills, 35 years after, Caltech, Los Angeles, USA, March-April, 2012
121. Progress in Quantum Field Theory and String Theory, Osaka, Japan, April 2012
122. IIP-ICTP School on Gravity and String Theory, Natal, Brazil, May 2012
123. Black Holes and Information, Santa Barbara, USA, May 2012
124. String Math 2012, Bonn, Germany, July 2012
125. The holographic Way: String theory, Gauge theory and Black Holes, Stockholm, Sweden, October 2012
126. Indian Strings Meeting, Puri, India, December 2012

127. Strings 2013, Seoul, South Korea, June 2013
128. GR20, Warsaw, Poland, July 2013
129. Rikkyo Math-Phys 2014, Tokyo, Japan, January 2014
130. Asian Winter School 2014, Puri, India, January 2014
131. Strings 2014, Princeton, USA, June 2014
132. Recent developments in string theory, Ascona, Switzerland, July 2014
133. String field theory and related aspects, SISSA, Trieste, Italy, July-August 2014
134. ICTP 50th Anniversary conference, ICTP, Trieste, October 2014.
135. CERN Winter school, Geneva, Switzerland, February 2015.
136. ICTP Spring School, Trieste, Italy, March-April, 2015.
137. Superstring perturbation theory, Perimeter Institute, Waterloo, Canada, April 2015.
138. String field theory and related topics, Center for Theoretical Physics, Sichuan University, China, May 2015.
139. Advanced String School, ICTS, Bangalore, India, June 2015.
140. Strings 2015, ICTS, Bangalore, India, June 2015
141. National Strings Meeting, Mohali, India, December 2015
142. Indian-Israeli workshop on quantum field theory and string theory, Goa, India, December 2105
143. String-Math 2015, Sanya, China, December 2015 - January 2016.

LIST OF RESEARCH PUBLICATIONS

In chronological order

1. Ashoke Sen, ASYMPTOTIC BEHAVIOR OF THE SUDAKOV FORM-FACTOR IN QCD.
Phys.Rev.D24:3281,1981.
2. Ashoke Sen, ASYMPTOTIC BEHAVIOR OF THE WIDE ANGLE ON-SHELL QUARK SCATTERING AMPLITUDES IN NONABELIAN GAUGE THEORIES.
Phys.Rev.D28:860,1983.
3. Ashoke Sen, ASYMPTOTIC BEHAVIOR OF THE FERMION AND GLUON EXCHANGE AMPLITUDES IN MASSIVE QUANTUM ELECTRODYNAMICS IN THE REGGE LIMIT.
Phys.Rev.D27:2997,1983.
4. Ashoke Sen, CONSERVATION LAWS IN THE MONOPOLE INDUCED BARYON NUMBER VIOLATING PROCESSES.
Phys.Rev.D28:876,1983.
5. Ashoke Sen, George Sterman, CANCELLATION OF SUDAKOV EFFECTS IN THE DRELL-YAN PROCESS.
Nucl.Phys.B229:231,1983.
6. Yoichi Kazama, Ashoke Sen, ON THE CONSERVATION OF ELECTRIC CHARGE AROUND A MONOPOLE OF FINITE SIZE.
Nucl.Phys.B247:190,1984.
7. Ashoke Sen, A LOCALLY SUPERSYMMETRIC SU(6) GRAND UNIFIED THEORY WITHOUT FINE TUNING AND STRONG CP PROBLEMS.
Phys.Rev.D31:900,1985.
8. Ashoke Sen, ROLE OF CONSERVATION LAWS IN THE CALLAN-RUBAKOV PROCESS WITH ARBITRARY NUMBER OF GENERATION OF FERMIONS.
Phys.Rev.Lett.52:1755,1984.

9. Ashoke Sen, MONOPOLE INDUCED BARYON NUMBER VIOLATION DUE TO WEAK ANOMALY.
Nucl.Phys.B250:1,1985.
10. Ashoke Sen, SLIDING SINGLET MECHANISM IN N=1 SUPERGRAVITY GUT.
Phys.Lett.148B:65,1984.
11. Ashoke Sen, RADIATIVE CORRECTIONS IN GRAND UNIFIED THEORIES BASED ON N=1 SUPERGRAVITY. 1. NONGAUGE THEORIES.
Phys.Rev.D30:2608,1984.
12. Ashoke Sen, COMPARISON OF THE CANONICAL HAMILTONIAN AND THE HAMILTONIAN OF CALLAN AND RUBAKOV FOR THE MONOPOLE FERMION SYSTEM.
Phys.Rev.D31:433,1985.
13. Ashoke Sen, RADIATIVE CORRECTIONS IN SUPERSYMMETRIC GAUGE THEORIES.
Phys.Rev.D31:2100,1985.
14. Ashoke Sen, BARYON NUMBER VIOLATION INDUCED BY THE MONOPOLES OF THE PATI-SALAM MODEL.
Phys.Lett.153B:55,1985.
15. Ashoke Sen, Hidenaga Yamagishi, LOCALIZATION OF THE DYON CHARGE.
Phys.Rev.D31:3285,1985.
16. Ashoke Sen, NATURALLY LIGHT HIGGS DOUBLET IN SUPERSYMMETRIC E6 GRAND UNIFIED THEORY
Phys.Rev.Lett.55:33,1985.
17. Ashoke Sen, RADIATIVE CORRECTIONS IN GRAND UNIFIED THEORIES BASED ON N=1 SUPERGRAVITY. 2. GAUGE THEORIES.
Phys.Rev.D32:411,1985.
18. L.D. McLerran, Ashoke Sen, THERMODYNAMICS OF QCD IN THE LARGE N LIMIT.
Phys.Rev.D32:2794,1985.
19. Ashoke Sen, THE HETEROTIC STRING IN ARBITRARY BACKGROUND FIELD
Phys.Rev.D32:2102,1985.

20. Ashoke Sen, EQUATIONS OF MOTION FOR THE HETEROTIC STRING THEORY FROM THE CONFORMAL INVARIANCE OF THE SIGMA MODEL
Phys.Rev.Lett.55:1846,1985.
21. Ashoke Sen, LOCAL GAUGE AND LORENTZ INVARIANCE OF THE HETEROTIC STRING THEORY.
Phys.Lett.166B:300,1986.
22. T. Banks, Dennis Nemeschansky, Ashoke Sen, DILATON COUPLING AND BRST QUANTIZATION OF BOSONIC STRINGS
Nucl.Phys.B277:67,1986.
23. Ashoke Sen, SUPERSPACE ANALYSIS OF LOCAL LORENTZ AND GAUGE ANOMALIES IN THE HETEROTIC STRING THEORY.
Phys.Lett.174B:277,1986.
24. Ashoke Sen, (2, 0) SUPERSYMMETRY AND SPACE-TIME SUPERSYMMETRY IN THE HETEROTIC STRING THEORY
Nucl.Phys.B278:289,1986.
25. Dennis Nemeschansky, Ashoke Sen, CONFORMAL INVARIANCE OF SUPERSYMMETRIC SIGMA MODELS ON CALABI-YAU MANIFOLDS
Phys.Lett.178B:365,1986.
26. Ashoke Sen, CENTRAL CHARGE OF THE VIRASORO ALGEBRA FOR SUPERSYMMETRIC SIGMA MODELS ON CALABI-YAU MANIFOLDS.
Phys.Lett.178B:370,1986.
27. Ashoke Sen, HETEROTIC STRING THEORY ON CALABI-YAU MANIFOLDS IN THE GREEN-SCHWARZ FORMALISM
Nucl.Phys.B284:423,1987.
28. Joseph J. Atick, Ashoke Sen, CORRELATION FUNCTIONS OF SPIN OPERATORS ON A TORUS.
Nucl.Phys.B286:189,1987.
29. Joseph J. Atick, Ashoke Sen, SPIN FIELD CORRELATORS ON AN ARBITRARY GENUS RIEMANN SURFACE AND NONRENORMALIZATION THEOREMS IN STRING THEORIES.
Phys.Lett.186B:339,1987.
30. Joseph J. Atick, Ashoke Sen, COVARIANT ONE LOOP FERMION EMISSION AMPLITUDES IN CLOSED STRING THEORIES.
Nucl.Phys.B293:317,1987.

31. Joseph J. Atick, Lance J. Dixon, Ashoke Sen, STRING CALCULATION OF FAYET-ILIOPOULOS D TERMS IN ARBITRARY SUPERSYMMETRIC COMPACTIFICATIONS
Nucl.Phys.B292:109,1987.
32. Joseph J. Atick, Ashoke Sen, TWO LOOP DILATON TADPOLE INDUCED BY FAYET-ILIOPOULOS D TERMS IN COMPACTIFIED HETEROTIC STRING THEORIES.
Nucl.Phys.B296:157,1988.
33. Ashoke Sen, MASS RENORMALIZATION AND BRST ANOMALY IN STRING THEORIES.
Nucl. Phys.B304:403,1988.
34. Joseph J. Atick, Jeffrey M. Rabin, Ashoke Sen, AN AMBIGUITY IN FERMIONIC STRING PERTURBATION THEORY.
Nucl.Phys.B299:279,1988.
35. Joseph J. Atick, Gregory Moore, Ashoke Sen, SOME GLOBAL ISSUES IN STRING PERTURBATION THEORY.
Nucl.Phys.B308:1,1988.
36. Joseph J. Atick, Gregory Moore, Ashoke Sen, CATOPTRIC TADPOLES.
Nucl.Phys.B307:221,1988.
37. Samir D. Mathur, Sunil Mukhi, Ashoke Sen, CORRELATORS OF PRIMARY FIELDS IN THE $SU(2)$ W Z W THEORY ON RIEMANN SURFACES.
Nucl.Phys.B305:219,1988.
38. Samir D. Mathur, Sunil Mukhi, Ashoke Sen, DIFFERENTIAL EQUATIONS FOR CORRELATORS AND CHARACTERS IN ARBITRARY RATIONAL CONFORMAL FIELD THEORIES.
Nucl.Phys.B312:15,1989.
39. Samir D. Mathur, Sunil Mukhi, Ashoke Sen, ON THE CLASSIFICATION OF RATIONAL CONFORMAL FIELD THEORIES.
Phys.Lett.B213:303,1988.
40. Samir D. Mathur, Sunil Mukhi, Ashoke Sen, RECONSTRUCTION OF CONFORMAL FIELD THEORIES FROM MODULAR GEOMETRY ON THE TORUS.
Nucl.Phys.B318:483,1989.
41. Samir D. Mathur, Ashoke Sen, DIFFERENTIAL EQUATION FOR GENUS TWO CHARACTERS IN ARBITRARY RATIONAL CONFORMAL FIELD THEORIES.
Phys.Lett.B218:176,1989.

42. Ashoke Sen, EXACTLY SOLVABLE STRING COMPACTIFICATION ON CALABI-YAU MANIFOLDS IN THE GREEN-SCHWARZ FORMALISM.
Phys.Lett.B224:278,1989.
43. Sunil Mukhi, Sudhakar Panda, Ashoke Sen, CONTOUR INTEGRAL REPRESENTATIONS FOR THE CHARACTERS OF RATIONAL CONFORMAL FIELD THEORIES.
Nucl.Phys.B326:351,1989.
44. Samir D. Mathur, Ashoke Sen, GROUP THEORETIC CLASSIFICATION OF RATIONAL CONFORMAL FIELD THEORIES WITH ALGEBRAIC CHARACTERS.
Nucl.Phys.B327:725,1989.
45. P. Durganandini, Sudhakar Panda, Ashoke Sen, SOME PROPERTIES OF SUPERCHARACTERS IN SUPERCONFORMAL FIELD THEORIES.
Nucl.Phys.B332:433,1990.
46. Ashoke Sen, OPEN STRING FIELD THEORY IN NONTRIVIAL BACKGROUND FIELD: GAUGE INVARIANT ACTION.
Nucl.Phys.B334:350,1990.
47. Ashoke Sen, OPEN STRING FIELD THEORY IN ARBITRARY BACKGROUND FIELD. 2. FEYNMAN RULES AND FOUR POINT AMPLITUDES.
Nucl.Phys.B334:395,1990.
48. Ashoke Sen, OPEN STRING FIELD THEORY IN NONTRIVIAL BACKGROUND FIELD. 3. N POINT AMPLITUDE.
Nucl.Phys.B335:435,1990.
49. A.S. Schwarz, Ashoke Sen, GLUING THEOREM, STAR PRODUCT AND INTEGRATION IN OPEN STRING FIELD THEORY IN ARBITRARY BACKGROUND FIELDS.
Int.J.Mod.Phys.A6:5387-5408,1991.
50. Ashoke Sen, EQUATIONS OF MOTION IN NONPOLYNOMIAL CLOSED STRING FIELD THEORY AND CONFORMAL INVARIANCE OF TWO- DIMENSIONAL FIELD THEORIES.
Phys.Lett.B241:350-356,1990.
51. Ashoke Sen, ON THE BACKGROUND INDEPENDENCE OF STRING FIELD THEORY.
Nucl.Phys.B345:551-583,1990.

52. Ashoke Sen, NONTRIVIAL RENORMALIZATION GROUP FIXED POINTS AND SOLUTIONS OF STRING FIELD THEORY EQUATIONS OF MOTION.
Phys.Lett.B252:566-572,1990.
53. Ashoke Sen, ON THE BACKGROUND INDEPENDENCE OF STRING FIELD THEORY. 2. ANALYSIS OF ON-SHELL S MATRIX ELEMENTS.
Nucl.Phys.B347:270-318,1990.
54. Ashoke Sen, MATRIX MODELS AND GAUGE INVARIANT FIELD THEORY OF SUBCRITICAL STRINGS.
Int.J.Mod.Phys.A7:2559-2588,1992.
55. Ashoke Sen, VIRASORO CONSTRAINTS ON THE MATRIX MODEL PARTITION FUNCTION AND STRING FIELD THEORY.
Int.J.Mod.Phys.A7:1553-1581,1992.
56. Sudipta Mukherji, Ashoke Sen, SOME ALL ORDER CLASSICAL SOLUTIONS IN NONPOLYNOMIAL CLOSED STRING FIELD THEORY.
Nucl.Phys.B363:639-664,1991.
57. Debashis Ghoshal, Ashoke Sen, PARTITION FUNCTIONS OF PERTURBED MINIMAL MODELS AND BACKGROUND DEPENDENT FREE ENERGY OF STRING FIELD THEORY.
Phys.Lett.B265:295-302,1991.
58. Sudipta Mukherji, Sunil Mukhi, Ashoke Sen, NULL VECTORS AND EXTRA STATES IN $C = 1$ STRING THEORY.
Phys.Lett.B266:337-344,1991.
59. Sudipta Mukherji, Sunil Mukhi, Ashoke Sen, BLACK HOLE SOLUTION AND ITS INFINITE PARAMETER GENERALIZATIONS IN $C = 1$ STRING FIELD THEORY.
Phys.Lett.B275:39-46,1992.
60. Ashoke Sen, $O(D) \times O(D)$ SYMMETRY OF THE SPACE OF COSMOLOGICAL SOLUTIONS IN STRING THEORY, SCALE FACTOR DUALITY AND TWO-DIMENSIONAL BLACK HOLES
Phys.Lett.B271:295-300,1991.
61. Ashoke Sen, TWISTED BLACK P-BRANE SOLUTIONS IN STRING THEORY.
Phys.Lett.B274:34-40,1992. [hep-th 9108011]
62. S.F. Hassan, Ashoke Sen, TWISTING CLASSICAL SOLUTIONS IN HETEROTIC STRING THEORY
Nucl.Phys.B375:103-118,1992. [hep-th 9109038]

63. Debashis Ghoshal, Ashoke Sen, GAUGE AND GENERAL COORDINATE INVARIANCE IN NONPOLYNOMIAL CLOSED STRING THEORY.
Nucl.Phys.B380:103-127,1992. [hep-th 9110038]
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