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Nationality US citizen

Education

1981 Ph. D., Nagoya University, (Physics)
1975 M. S., Nagoya University, (Physics)
1973 B. S., Nagoya University, (Physics)

Professional Experience

2015-Present **Principal Research Scientist II**, Department of Physics,
University of Alabama in Huntsville
2010-2015 **Associate Research Professor**, Department of Physics,
University of Alabama in Huntsville
2006-2013 **Research Scientist III**, CSPAR,
University of Alabama in Huntsville
2005-2006 **Research Scientist**, Department of Physics and Astronomy,
University of Alabama Tuscaloosa
2002-2005 **NRC Senior Research Fellow**, MSFC/NSSTC
1999-2002 **Research Assistant Professor**, Department of Physics and Astronomy,
Rutgers University
1996-1999 **Assistant Professor—Research**, Department of Physics and Astronomy,
Louisiana State University
1995-1996 **Research Scientist**, Department of Space Physics and Astronomy,
Rice University
1990-1995 **Associate Research Scientist**, Department of Physics and Astronomy,
The University of Iowa
1984-1990 **Assistant Research Scientist**, Department of Physics and Astronomy,
The University of Iowa
1982-1984 **Research Physicist I**, Princeton Plasma Physics Laboratory,
Princeton University
1981-1982 **Research Fellow**, Institute of Plasma Physics,
Nagoya University
1980-1981 **Research fellow** supported by Japan Society for the Promotion of Science,
Institute of Plasma Physics, Nagoya University
1979-1980 **Research Fellow**, Division of Thermonuclear Fusion Research,
Japan Atomic Energy Research Institute

Visiting Scientist

April - June 2008 The Observatoire de Paris, Meudon, France
Nov. 2000 Max-Plank-Institut für Aeronomie, Lindau, Germany

Sept. 2000	CETP, Paris, France
May 2000	CETP, Paris, France
Jan. - March 1997	The University of Tsukuba, Japan
Sept. - Oct. 1996	Max-Plank-Institut für Extraterrestrische Physik Berlin, Germany
Jan. - March 1995	Max-Plank-Institut für Extraterrestrische Physik Berlin, Germany
March - June 1990	Max-Plank-Institut Für Extraterrestrische Physik Garching, Germany

Teaching Experience

April 1981-March 1982	Teaching Assistant, Chubu University, Nagoya
Fall 2011	PH 789 Computational Methods for Kinetic Processes in Plasma Physics, at UAH
Spring 2015	PH 731 Advanced Plasma Theory, at UAH

Professional Membership

American Geophysical Union
 American Physical Society
 American Astronomical Society
 National Union Radio Science
 Committee on Space Research (COSPAR)
 International Astronomical Union

Recent Professional Activities

Referee, Journals: Journal of Geophysical Research
 Geophysical Research Letters
 Physics of Plasmas
 Solar Physics
 Astrophysical Journal
 Monthly Notices of the Royal Astronomical Society
 Astronomy and Astrophysics
 Advances in Space Research
 Offices: National Aeronautics and Space Administration (NASA)
 National Science Foundation (NSF)
 French National Research Agency (ANR)
 Czech Science Foundation (GACR)
 Ministry of Education, Lifelong Learning and Religious Affairs (Greece)

Advised Students

Graduate students (Ph.D.)

1. Jie Zhao, Ph.D. March, 1997, (with Professor Jun-ichi Sakai, Toyama University)
 “Coalescence of Two Parallel Current Loops in a Nonrelativistic Electron-Positron Plasma”
 (presently at Lucent Technology)
2. Tadashi Kitanishi, Ph.D. March, 1997, (with Professor Jun-ichi Sakai, Toyama University)
 “The Dynamics of Electron-Positron Plasma Cloud moving across a Magnetic Field”
 (presently at Electric Co.)
3. Jianxiang Wang, Ph.D. October, 2005, “Simulations of Galaxy Dynamics”
 (with Professor David Merritt, Rutgers University)
 (served on thesis committee for one year)
4. XiaoYang Yan, Ph.D. March, 2005 “Particle entry into inner magnetosphere

- through “cross-tail S,” (with Professor Dong Sheng Cai, University of Tsukuba) (presently at South China University of Technology, GuangZhou, China)
5. Christian Hededen, Ph.D. May, 2005, “Gamma-Ray Bursts, Collisionless Shocks and Synthetic Spectra” ([astro-ph/0506559](#)),
(with Prof. Åke Nordlund at Niels Bohr Institute)
“The influence of an ambient magnetic field on relativistic collisionless plasma shocks” published in *ApJ*, 623, L89, 2005 (visited from 15 January through 14 May 2004)
 6. Ioana Dutan, Ph.D. January, 2011 “Jets from Spinning Black Holes in Active Galactic Nuclei” (<http://hss.ulb.uni-bonn.de/2011/2419/2419.htm>)
at the Max-Planck-Institut für Radioastronomie Bonn,
(Prof. Peter Birnmann) worked on jet formation with GRMHD simulations
presently Institute of Space Science (<http://www2.spacescience.ro/>)
 7. Adam Goldstein, Ph.D. December, 2012, “THE USE OF THE BULK PROPERTIES OF GAMMA-RAY BURST PROMPT EMISSION SPECTRA FOR THE STUDY OF COSMOLOGY”, at UAHuntsville (thesis committee)
 8. Helen H. Kang, Ph.D. February 2013, “PIC simulation study on the magnetic field generation by the anisotropic kinetic energy of plasma”, at POSTEC (Prof. Chang-Mo Ryu) (adviser), presently at the National Fusion Research Institute (NFRI) in Daejeon, South Korea
 9. Eun-Jin Choi, Ph.D. February, 2015, “Study of the Evolution of Double Layer and Electrostatic Shock using PIC simulations”, at KAIST (Prof. Kyoung Min) (adviser)
presently working at GSFC
 10. Joshua Woods, Ph.D., May, 2015, Multidimensional Simulations of Non-linear Cosmic Ray Production in Supernova Remnant Evolution, at Clemson University
(Prof. Dieter Hartmann) (adviser)
 11. Kazem Ardaneh, Ph.D. candidate at University of Tsukuba (Prof. Dong-Sheng Cai) (adviser)
 12. Xiaocan Li, Ph.D. candidate, Space Science (Prof. G. Li) (thesis committee)
 13. Sarthak Dasadia, Ph.D. candidate, Physics (Prof. M. Sun) (thesis committee)

Graduate student (Master)

1. Akito Kawamura, M.S. Thesis, May 2012, “THREE DIMENSIONAL TEST PARTICLE SIMULATION OF INTERSTELLAR OXYGEN INTERACTION WITH THE HELIOSPHERE AND ANALYSES FOR THE IBEX MISSION”, PHYSICS, UAHuntsville (thesis committee), graduated December 2012 (presently at Kyoto University)
2. Sai Chandu Radavaram, M.S. Thesis, November 2015, “SIMULATION OF THE PROPAGATION OF AN ELECTROMAGNETIC WAVE IN DIELECTRIC MEDIUM WITH A TIME VARYING DIELECTRIC CONSTANT?, The Department of Electrical and Computer Engineering, UAHuntsville (adviser)

Undergraduate students

1. Timothy P. Van Vliet for Honor Program April 2001 “Jet Generation from Black Holes” at Rutgers University, (graduated from University of Colorado Boulder)
2. Steven Crew for Honor Program, “Particle Simulation Studies of Reconnection” at Rutgers University, 2001
3. Hiroaki Tanaka for Honor Program, “Particle Simulation Studies of Kinetic Kelvin-Helmholtz Instability” Spring 2013
4. Joshua M. McMurray worked on his senior project on “Analysis of a Round Kick”. He presented his research and reposted a short journal. Spring of 2014.
5. Kyle Rattle and Qiana Hunt: Short workshop on kinetic study of astrophysical jets

with particle-in-cell code: From introduction to recent research with 3-D illustration of jets with current filaments and magnetic field lines to understand the physics involved.

They presented 15 minute talk using Powerpoint. They also prepared a short reports.

6. Qiana Hunt for Honor Program PH499), “Particle Simulation Studies of Global Jets with the Weibel and kinetic Kelvin-Helmholtz Instability” Spring 2015

Collaborators

Miguel Aloy (Univ. of Valencia), Narayana Bhat (UAHuntsville), Dong-Sheng Cai (Univ. of Tsukuba), Eun-Jin Choi (KAIST), Ioana Dutan (Institute of Space Science, Romania), Gerald J. Fishman (NASA/MSFC), Christian Fendt (MPIA), Jose Gomez (IAA-CSIC), Philip Hardee (UA Tuscaloosa), Dieter Hartmann (Clemson U.), John Kirk (MPIfK), Bertrand Lembege (LAMOS/IPSL), Yuri Lubarsky (Ben-Gurion U.), Alan Marscher (Boston University), Mikhail Medvedev (Univ. Kansas), Athina Meli (University of Gent), Kyong Min (KAIST), Yosuke Mizuno (Goethe University Frankfurt), Shigehiro Nagataki (RIKEN), Jacek Niemiec (Institute of Nuclear Physics PAN, Cracow), Åke Nordlund (NBI), Martin Pohl (Posdam Univeristy/DESY), Luciano Rezzolla (Goethe University Frankfurt), Kazunari Shibata (Kyoto University), Helene Sol (Observatoire de Paris-Meudon), Jacob Trier Frederiksen (NBI), Michael Watson (Fisk U.), Bing Zhang (UNLV), Kinshaw Wu (University College London)

Research Articles in refereed journals (Ken-Ichi Nishikawa) (as of May 18, 2016)

111. Ardaneh,Kazem, Cai,Dongsheng, and Nishikawa,Ken-Ichi, Collisionless electron-ion shocks in relativistic unmagnetized jet-ambient interactions: Non-thermal electron injection by double layer, ApJ, submitted, 2016 (arXiv:1604.04388) (part of Ardaneh's Ph.D. Thesis)
110. Niemiec, J., Florinski, V., Heerikhuisen, J., and Nishikawa, K.-I. The IBEX ribbon and the pickup ion ring stability in the outer heliosheath II. Monte-Carlo and PIC model results, ApJ, accepted, 2016
109. Cai, D., Lembège, B., Hasegawa, H., Huang, Z., & Nishikawa, K.-I., Identifying 3D vortex structures at/around the magnetopause using a tetrahedral satellite configuration: 2D Kelvin-Helmholtz vortex or 3D vortex? JGR, submitted, 2016
108. Nishikawa, K.-I., Frederiksen, J. T., Nordlund, A., Mizuno, Y., Hardee, P. E., Niemiec, J., Gomez, J. L., Pe'er, A., Dutan, I., Meli, A., Sol, H., Pohl, M. & Hartmann, D. H., Evolution of Global Relativistic Jets: Collimations and Expansion with kKHI and the Weibel Instability, ApJ, 820, 94, 2016 (arXiv:1511.03581)
107. Wieland, V., Pohl, M., Niemiec, J., Rafighi, I., Nishikawa, K.-I., Non-relativistic Perpendicular Shocks in Supernova Remnants, ApJ, 820, 62, 2016 (arXiv:1602.05064)
106. Cai, D. Esmaeili, B. Lembège, K-I, Nishikawa, Cusp dynamics under northward IMF using three-dimensional global particle-in-cell simulations, J. Geophys. Res. Space Physics, 120, doi:10.1002/2015JA021230, 2015
105. Ardaneh, K., Cai, D.S. Nishikawa, K.-I., & Lenbege, B., Collisionless Weibel shocks and electron acceleration in gamma-ray bursts, ApJ, 811, 57, 2015 (arXiv:1507.05374)
104. Mizuno, Y., Gómez, J., Nishikawa, K.-I., Meli, A., Hardee, P. E. & Rezzolla, L., Recoolimation shocks in magnetized relativistic jets, ApJ, 809, 38, 2015
103. Nishikawa, K.-I., P. Hardee, I. Dutan, J. Niemiec, M. Medvedev, Y. Mizuno, A. Meli, H. Sol, B. Zhang, M. Pohl, & D. H. Hartmann, Magnetic field generation via the kinetic Kelvin-Helmholtz instability in core-sheath jets, ApJ, 793, 60, 2014 (arXiv:1405.5247)
102. Choi, E. J., K. Min, K.-I. Nishikawa, & C. R. Choi, A Study on the Evolution of Relativistic Electron-Ion Shock Using 3D PIC Simulations, Physics of Plasmas, 21, 072905, 2014 (arXiv:1407.4540)
101. Ardaneh, K., Cai, D.S. & Nishikawa, K.-I., Amplification of Weibel instability in the relativistic beam plasma, interactions due to ion streaming, New Astronomy, 33, 1, 2014
100. Mizuno, Y., Hardee, P. E. & Nishikawa, K.-I., Spatial Growth of the Current-Driven Instability in Relativistic Jets, ApJ, 784, 167, 2014
99. Nishikawa, K.-I., P. Hardee, Y. Mizuno, I. Dutan, B. Zhang, M. Medvedev, A. Meli, E. J. Choi, K. W. Min, J. Niemiec, A. Nordlund, J. T. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, A. Marscher, & J. Gomez, Particle Acceleration and Magnetic Field Generation in Shear-Flows, International Journal of Modern Physics: Conference Series, 28, 1460195, 2014
98. Mizuno, Y., K.-I. Nishikawa, Y. Lyubarsky, P. Hardee, Current-Driven Kink Instability in Magnetically Dominated Rotating Relativistic Jet, International Journal of Modern Physics: Conference Series, 28, 1460201, 2014

97. Mizuno, Y., Pohl, M., Niemiec, J., Zhang, B., Nishikawa, K.-I., & Hardee, P. E., Magnetic Field Amplification and Saturation in Turbulence Behind a Relativistic Shock, *MNRAS*, 439, 3490, 2014 (arXiv:1401.7080)
96. Nishikawa, K.-I., B. Zhang, I. Dutan, M. Medvedev, P. Hardee, E.-J. Choi, K. Min, J. Niemiec, Y. Mizuno, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, & D. H. Hartmann, Magnetic field generation in a jet-sheath plasma via the kinetic Kelvin-Helmholtz instability, *Ann. Geophys.*, 31, 1535-1541, 2013
95. Mizuno, Y., Y. Lyubarsky, K.-I. Nishikawa, & P. E Hardee, Three-Dimensional Relativistic Magnetohydrodynamic Simulations of Current-Driven Instability. III. Rotating Relativistic Jets, *ApJ*, 757, 16 (14pp), 2012
94. Hardee, P. E., Y. Mizuno, & K.-I. Nishikawa, Current Driven Instability of a Sub-Alfvénic Relativistic Jet, Proceedings for High Energy Phenomena in Relativistic Outflow III, *Int. J. of Mod. Phys. Conf. Ser.*, 8, 340, 2012
93. Mizuno, Y., M. Pohl, J. Niemiec, B. Zhang, K.-I. Nishikawa, & P. E Hardee, Magnetic Field Amplification by Relativistic Shocks in an Inhomogeneous Medium, Proceedings for High Energy Phenomena in Relativistic Outflow III, *Int. J. of Mod. Phys. Conf. Ser.*, 8, 364, 2012
92. Nishikawa, K.-I., J. Niemiec, B. Zhang, M. Medvedev, P. Hardee, Y. Mizuno, Å. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, & G. J. Fishman, Simulation of relativistic shocks and associated radiation, Proceeding of High Energy Phenomena in Relativistic Outflows III, *Int. J. Mod. Phys. Conf. Ser.*, 8, 259, 2012
91. Nishikawa, K.-I., B. Zhang, E.-J. Choi, K. Min, P. Hardee, Y. Mizuno, J. Niemiec, M. Medvedev, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, & J. F. Fishman, Radiation from accelerated particles in shocks and reconnection regions, *IAU Symposium 279: Death of Massive Stars: Supernovae & Gamma-Ray Bursts*, 371, 2012
90. Nishikawa, K.-I., J. Niemiec, M. Medvedev, B. Zhang, P. Hardee, A. Nordlund, J. Frederiksen, Y. Mizuno, H. Sol, M. Pohl, & D. H. Hartmann, M. Oka, G. J. Fishman, Radiation from relativistic shocks with turbulent magnetic fields, *Advances in Space Research*, 47, pp. 1434 - 1440, 2011
89. Mizuno, Y., Y. Lyubarsky, K.-I. Nishikawa, & P. H. Hardee, Three-Dimensional Relativistic Magnetohydrodynamic Simulations of Current-Driven Instability. II. Relaxation of Pulsar Wind Nebula by Current-Driven Kink Instability, *ApJ*, 728, 90 (7pp), 2011
88. Mizuno, Y., M. Pohl, J. Niemiec, B. Zhang, K.-I. Nishikawa, & P. Hardee, Magnetic Field Amplification by Relativistic Shocks in An Inhomogeneous Medium, *ApJ*, 726, 62 (11pp), 2011
87. Mizuno, Y., P. E. Hardee, & K.-I. Nishikawa, Three-Dimensional Relativistic Magnetohydrodynamic Simulations of Current-Driven Instability with A Sub-Alfvénic Jet: Temporal Properties, *ApJ*, 734, 19 (18pp), 2011
86. Watson, M. & K.-I. Nishikawa, A Method for Incorporating the Kerr-Schild Metric in Electromagnetic Particle-in-Cell Code, *Comput. Phys. Commun.*, 181, 17501757, 2010
85. Mizuno, Y., B. Zhang, B. Giacomazzo, K.-I. Nishikawa, P. Hardee, S. Nagataki, & H. Hartmann, Magnetohydrodynamic Effects in Relativistic Jets, *Intern. J. of Mod. Phys. D*, 19, 991, 2010

84. Nishikawa, K.-I., Niemiec, J., Medvedev, M., Zhang, B., Hardee, P., Mizuno, Y., Nordlund, Å. Frederiksen, J., Sol, H., Pohl, M., Hartmann, D. H., Oka, M., & Fishman, J. F., Radiation from Relativistic Shocks with Turbulent Magnetic Fields, *Intern. J. of Mod. Phys. D*, 19, 715, 2010
83. Mizuno, Y., Hardee, P. E., Lyubarsky, Y., & Nishikawa, K.-I., Current-Driven Kink Instability in Relativistic Jets, *IJMPD*, 19, 683, 2010
82. Mizuno, Y., Y. Lyubarsky, K.-I. Nishikawa, & P. H. Hardee, Three-Dimensional Relativistic Magnetohydrodynamic Simulations of Current-Driven Instability. I. Instability of a Static Column, *ApJ*, 700, 684, 2009
81. Nishikawa, K. -I., J. Niemiec, P. Hardee, M. Medvedev, H. Sol, Y. Mizuno, B. Zhang, M. Pohl, M. Oka, & D. H. Hartmann, Weibel instability and associated strong fields in a fully 3D simulation of a relativistic shock, *ApJ*, 698, L10, 2009
80. Cai, D. S., W. Tao, X. Yan, B. Lembege, & K.-I. Nishikawa, Bifurcation and hysteresis of magnetospheric structure with a varying Southward IMF: Field topology and global three-dimensional full particle simulations, *JGR*, 114, A12210, 2009
79. Mizuno, Y., B. Zhang, B. Giacomazzo, K.-I. Nishikawa, P. Hardee, S. Nagataki, & H. Hartmann, Magnetohydrodynamic Effects in Propagating Relativistic Jets: Reverse Shock and Magnetic Acceleration, *ApJ*, 690, L47, 2009
78. Oka, M., A M. Fujimoto, T. K. M. Nakamura, I. Shinohara, & K.-I. Nishikawa, Magnetic Reconnection by a Naturally Retreating X-Line, *PRL*, 101, 205004, 2008
77. Tao, W. F., D. S. Cai, X. Y. Yan, K.-I. Nishikawa, & B. Lembege, Scalability analysis of parallel Particle-In-Cell codes on computational grids, *Comp. Phys. Comm.*, 179, 855, 2008
76. Niemiec, J., M. Pohl, T. Stroman, & K.-I. Nishikawa, Production of Magnetic Turbulence by Cosmic Rays Drifting Upstream of Supernova Remnant Shocks, *ApJ*, 684, 1174, 2008 (arXiv:astro-ph/0802.2185)
75. Nishikawa, K.-I., Mizuno, Y., Fishman, G. J., & Hardee, P., Particle Acceleration, Magnetic Field Generation, and Associated Emission in Collisionless Relativistic Jets, *Int. J. Mod. Phys. D*, 17, 1761, 2008 (arXiv:0801.4390 [astro-ph])
74. Mizuno, Y., P. Hardee, D. Hartmann, K.-I. Nishikawa, & B. Zhang, Magnetohydrodynamic Boost for Relativistic Jets, *ApJ*, 672, 72, 2008 (arXiv:0709.1839 [astro-ph])
73. Wu, K., S. V. Fuerst, Y. Mizuno, K.-I. Nishikawa, G. Brandurdi-Raymont, & K.G. Lee, General Relativistic Radiative Transfer: Applications to Black-Hole Systems, *Chin. J. Astron. Astrophys. Supplement*, 8, 226, 2008
72. Ramirez-Ruiz, E., K.-I. Nishikawa,& C. B. Hedderdal, e^\pm Loading and the origin of the upstream magnetic field in GRB shocks, *ApJ*, 671, 1877, 2007 (arXiv:0707.4381 [astro-ph])
71. Hardee, P., Y. Mizuno, & K.-I. Nishikawa, GRMHD/RMHD Simulations and Stability of Magnetized Spine-Sheath Relativistic Jets, *AstroPhys. & Space Sci.*, 311, 281-286, 2007 (arXiv:0706.1916 [astro-ph])
70. Mizuno, Y., P. Hardee, & K.-I. Nishikawa, 3D Relativistic Magnetohydrodynamic Simulations of Magnetized Spine-Sheath Relativistic Jets, *ApJ*, 662, 835-850, 2007

69. Cai, D. S., K.-I. Nishikawa, & B. Lembege, Magnetotail Field Topology in a Three-dimensional Global Particle Simulation, *Plasma Phys. and Controlled Fusion*, 48, B123 - B135, 2006
68. Nishikawa, K.-I., E. Ramirez-Ruiz, C. B. Hededal, P. Hardee, Y. Mizuno, G. J. Fishman, Simulation study of jitter radiation associated with afterglows observed with Swift, *Il Nuovo Cimento B*, 121, 1543, 2006
67. Nishikawa, K.-I., C. B. Hededal, P. Hardee, G. J. Fishman, C. Kouveliotou, & Y. Mizuno, 3-D RPIC Simulations of Relativistic Jets: Particle Acceleration, Magnetic Field Generation, and Emission, *Astrophys. Space Sci.*, 307, 319-323, 2007 (DOI 10.1007/s10509-006-9234-5)
66. Nishikawaa, K.-I., P. Hardee, C.B. Hededal, G. Richardson, R. Preece, H. Sol, G.J. Fishman, Particle acceleration, magnetic field generation, and emission in relativistic shocks, *Advances in Space Research*, 38, 1316, 2006
65. Nishikawa, K.-I., P. Hardee, C. B. Hededal, & G. J. Fishman, Acceleration Mechanics in Relativistic Shocks by the Weibel Instability, *Astrophys. J.*, 642, 1267, 2006
64. Cai, D. S., X. Y. Yan, K.-I. Nishikawa, & B. Lembege, Particle entry into the inner magnetosphere during duskward IMF B_y : Global three-dimensional electromagnetic full particle simulations, *Geophys. Res. Lett.*, 33, L12191, 2006.
63. Nishikawa, K.-I., P. Hardee, C. B. Hededal, H. Sol, G. Richardson, R. Preece, & G. J. Fishman, Particle acceleration, magnetic field generation, and emission in relativistic pair jets, *Il Nuovo Cimento C*/i_C, vol. 28, Issue 3, p.435, 2005
62. Hededal, C. B., & K.-I. Nishikawa, The influence of an Ambient Magnetic field on Relativistic Collisionless Plasma Shocks, *Astrophys. J.*, 623, L89, 2005.
61. Nishikawa, K.-I., P. Hardee, G. Richardson, R. Preece, H. Sol, & G. J. Fishman, Particle Acceleration and Magnetic Field Generation in Electron-Positron Relativistic Shocks, *Astrophys. J.*, 622, 927, 2005.
60. Nishikawa, K.-I., G. Richardson, S. Koide, K. Shibata, T. Kudoh, P. Hardee, & G. J. Fishman, A General Relativistic Magnetohydrodynamics Simulation of Jet Formation, *Astrophys. J.*, 625, 60, 2005.
59. Nishikawa, K.-I., P. Hardee, G. Richardson, R. Preece, H. Sol, & G. J. Fishman, Particle Acceleration in Relativistic Jets due to Weibel Instability, *Astrophys. J.*, 595, 555, 2003.
58. Cai, D.-S., Y. Li, K.-I. Nishikawa, C. Xiao, X. Yan, & Z. Pu, Parallel TRISTAN code using High Performance Fortran, *Space Plasma Simulation*, eds. J. Buechner, C. Dum, & M. Scholer, Springer-Verlag, Berlin, Heidelberg, pp. 25 - 53, 2003.
57. Cai, D.-S., Y. Li, K.-I. Nishikawa, C. Xiao, & X. Yan, Three-dimensional electromagnetic particle-in-cell code using High Performance Fortran on PC cluster, ISHPC 2002, LNCS eds H. Zima et al. pp. 515 - 525, 2002.
56. Nishikawa, K.-I., & S. Ohtani, Particle simulation study of substrom triggering with a southward IMF, *Advances in Space Research*, 30, 2675, 2002
55. Cai, D.-S., Y. Li, T. Ichikawa, C. Xiao, & K.-I. Nishikawa, Visualization and criticality of three-dimensional magnetic field topology in the magnetotail, *Earth Planets Space*, 53, 1011-1019, 2001.

54. Nishikawa, K.-I., Global particle simulation study of substorm onset and particle acceleration, *Space Sci. Rev.*, 95, 361, 2001.
53. Nishikawa, K.-I., & S. Ohtani, Global Particle Simulation for a Space Weather Model: Present and Future, *IEEE Trans. Plasma Sci.*, 28, 1991, 2000.
52. Nishikawa, K.-I., & S. Ohtani, Evolution of thin current sheet with a southward IMF studied by a 3-D EM particle code, *J. Geophys. Res.*, 105, 13,017, 2000.
51. Nishikawa, K.-I., J. Frank, D. M. Christodoulou, S. Koide, J.-I. Sakai, H. Sol, & R. L. Mutel, Dynamics of relativistic jets, *New Astron. Rev.*, 42, 653, 1998.
50. Nishikawa, K.-I., Particle entry through reconnection grooves in the magnetopause with a downward IMF as simulated by a 3-D EM particle code, *Geophys. Res. Lett.*, 25, 1609, 1998; Nishikawa, K.-I., & S. Ohtani, Particle entry through reconnection by a time-varying IMF as simulated by a 3-D EM particle code, in *Substorms-4*, ed. S. Kokubun and Y. Kamide, Kluwer Academic Pub, Dordrecht, p. 535, 1998.
49. Nishikawa, K.-I., S. Koide, J.-I. Sakai, D. M. Christodoulou, H. Sol, & R. L. Mutel, Three-dimensional magnetohydrodynamic simulations of relativistic jets injected oblique to a magnetic field, *Astrophys. J.*, 498, 166, 1998.
48. Nishikawa, K.-I., Reconstructions at near-Earth magnetotail and substorms studied by a 3-D EM particle code, in *Geospace Mass and Energy Flow: Results From the International Solar-Terrestrial Physics Program*, *Geophys. Monogr. Ser.*, vol. 104, edited by J. L. Horwitz, W. K. Peterson, and D. L. Gallagher, p. 175, AGU, Washington D.C., 1998.
47. Nishikawa, K.-I., Particle entry into the magnetosphere with a southward IMF as simulated by a 3-D EM particle code, *J. Geophys. Res.*, 102, 17,631, 1997.
46. Nishikawa, K.-I., S. Koide, J.-I. Sakai, D. M. Christodoulou, H. Sol, & R. L. Mutel, Three-dimensional magnetohydrodynamic simulations of relativistic jets injected along a magnetic field, *Astrophys. J.*, 483, L45, 1997.
45. Nishikawa, K.-I., J. Zhao, J.-I. Sakai, & T. Neubert, Study of nonlinear Alfvén waves in an electron-positron plasma with a 3-D EM particle code, *Adv. Space Res.*, 19, (1)117, 1997.
44. Zhao, J., J. I. Sakai, & K.-I. Nishikawa, Excitation of whistler waves driven by an electron temperature anisotropy, *Solar Phys.*, 168, 345, 1996.
43. Kitanishi, T., J. Zhao, J. I. Sakai, & K.-I. Nishikawa, Electromagnetic waves emitted from an electron-positron plasma cloud moving across a magnetic field, *Phys. Rev. E*, 53, 6376, 1996.
42. Koide, S. J. I. Sakai, K.-I. Nishikawa, & R. L. Mutel, Numerical simulation of bent jets: Propagation into an oblique magnetic field, *Astrophys. J.*, 464, 724, 1996; also in *Energy transport in radio galaxies and quasars*, edited by P. E. Hardee, A. H. Bridle, & J. A. Zensus, p. 371, 1996.
41. Koide, S., K.-I. Nishikawa, & R. L. Mutel, A two-dimensional Simulation of relativistic magnetized jet, *Astrophys. J.*, 463, L71, 1996.
40. Zhao, J., J. I. Sakai, & K.-I. Nishikawa, Coalescence of two parallel current loops in a non-relativistic electron-positron plasma, *Phys. Plasmas*, 3, 844, 1996.

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5. Nishikawa, K.-I., P. Hardee, G. Richardson, R. Preece, H. Sol, and G. J. Fishman, Particle Acceleration and Radiation associated with Magnetic Field Generation from Relativistic Collisionless Shocks, in Proceeding of Gamma Ray Bursts: 30 Years of Discovery, eds. E. Fenimore and M. Galassi, AIP, p. 290, 2004.
4. Nishikawa, K.-I., P. Hardee, G. Richardson, R. Preece, H. Sol, and G. J. Fishman, Particle Acceleration and Emission in Relativistic Jets, Proceedings of the 28th International Cosmic Ray Conference. July 31-August 7, 2003. Trukuba, Japan. Editors: T. Kajita, Y. Asaoka, A. Kawachi, Y. Matsubara and M. Sasaki, p. 2063, 2003
3. Nishikawa, K.-I., G. Richardson, R. Preece, P. Hardee, G. J. Fishman, S. Koide, K. Shibata, T. Kudoh, H. Sol, L. X. Li, J. P. Hughes, and R. Blandford, 3-D General Relativistic MHD Simulations of Generating Jets, Active Galactic Nuclei: From Central Engine to Host Galaxy, eds. S. Collin, F. Combes, and I. Shlosman, APS Conference Series, Vol 290, pp. 351 - 352, 2003
2. Nishikawa, K.-I., S. Koide, K. Shibata, T. Kudoh, H. Sol, J. P. Hughes, G. Richardson, R. Preece, P. Hardee, 3-D General Relativistic MHD Simulations of Generating Jets, in New Views on Microquasars, eds. P. Durouchoux, Y. Fuchs, and J. Rodriguez, Center for Space Physics, pp. 109 - 112, 2003
1. Nishikawa, K.-I., S. Koide, K. Shibata, T. Kudoh, & H. Sol, 3-D General Relativistic MHD Simulations of Generating Jets, in Particles and Fields in Radio Galaxies, eds. R. A. Laing and K. M. Blundell, APS Conference Series, Vol 250, pp. 22 - 26, 2001

Invited talks (since 2005 as of May 18, 2016)

14. Nishikawa, K.-I., et al., Radiation from accelerated particles in relativistic jets with shocks and shear-flow, Relativistic Jets: Creation, Dynamics, and Internal Physics, Krakow, Poland, April 20 - 24, 2015 (presentation is available at <http://www.oa.uj.edu.pl/jets2015/Program.html>)
13. Nishikawa, K.-I., et al., Radiation from Accelerated Particles in Relativistic Jets with Shocks and Shear-flow, Relativistic Jets: Creation, Dynamics, and Internal Physics, Krakow, Poland, April 20 - 24, 2015.
12. Nishikawa, K.-I., et al., Simulation of relativistic jets: Particle acceleration and associated self-consistent radiation, The 10th International School/Symposium for Space Simulations, Banff, Canada, July 24 - 31, 2011.
11. Nishikawa, K.-I., et al., Simulation of Relativistic Jets and Associated Self-consistent Radiation, ASTRONUM 2011, 6th International Conference on Numerical Modeling of Space Plasma Flows, Valencia, Spain, June 13 - 17, 2011.
10. Nishikawa, K.-I., et al., Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, Frontiers in Computational Astrophysics: Particles and Flames in Magnetic and Radiative Flows, Lyon, France, October 11 - 16, 2010,
9. Nishikawa, K.-I. et al., Simulation of Relativistic Shocks and Associated Self-consistent Radiation, UAH Huntsville Workshop 2010, Nashville, Ostober 3 - 8, 2010
8. Nishikawa, K.-I., et al., Simulation of Relativistic Shocks and Associated Radiation, ASTRONUM 2010, 5th International Conference on Numerical Modeling of Space Plasma Flows, San Diego, June 13 - 18, 2010
7. Nishikawa, K.-I., Simulation of relativistic shocks and associated self-consistent radiation, Isradynamic 2010, Ein Bokek, April 10 - 17, 2010

6. Nishikawa, K.-I., J. Niemiec, M. Medvedev, B. Zhang, P. Hardee, Y. Mizuno, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, J. F. Fishman , Simulation of Relativistic Shocks and Associated Self-consistent Radiation, Acceleration & Emission Processes at High Energies and their Application to AGN, Meudon, January 25 - 26, 2010
5. Nishikawa, K.-I, Simulation of Relativistic Shocks and Associated Radiation from Turbulent Magnetic Fields, 4th International Conference on Numerical Modeling of Space Plasma Flows, June 29th - July 3rd 2009, Centre de congrs Le Majestic, 241 Alle du Majestic Chamonix, France
4. Nishikawa, K.-I., Particle Acceleration and Associated Emission from Relativistic Shocks, KIAA Program on GRB Physics, Kavli Institute of Astronomy and Astrophysics (KIAA), Peking University, May 4 - June 19, 2009 (attended May 15 - 25)
3. Nishikawa, K.-I., Y. Mizuno, M. Watson, P. Hardee,, S. Fuerst, K. Wu, S. Koide, & G. J. Fishman, GRMHD and GRPIC Simulations, Workshop on An Inter-disciplinary Forum on Magnetospheric Activities in Moons, Planets, Stars and Black Holes. MSSL, 18 - 20 September 2007 (<http://www.mssl.ucl.ac.uk/theory/events/20070918/talks.html>)
2. Nishikawa, K.-I., Y. Mizuno, M. Watson, P. Hardee,, S. Fuerst, K. Wu, & G. J. Fishman, 3-D GRMHD and GRPIC Simulations of Disk-Jet Coupling and Emission, 11th Marcel Grossmann Meeting on General Relativity, Freie Universität Berlin, July 23 - 29, 2006
1. Nishikawa, K.-I, Particle Acceleration in Jets, AAS 206th meeting (#30.09), Minneapolis, 29 May - 2 June 2005

Talks and posters (since December 2005 as of May 18, 2016)

52. Niemiec, J., Florinski, V., Heerikhuisen, J., Nishikawa, K.-I., Pick-up Ion Scattering in the Outer Heliosheath-Implications for IBEX and Voyager 1 Observations, The 34th International Cosmic Ray Conference, July 30 - August 6, 2015, The Hahgue, The Netherlands, PoS(ICRC2015)179 (talk given by J. Niemiec)
51. Nishikawa, K.-I., et al., Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and possible reconnection, NORDITA workshop on Magnetic Reconnection in Plasmas, Stockholm, August 10 -14, 2015 (talk) (presentation is available at <http://agenda.albanova.se/conferenceDisplay.py?confId=4460>)
50. Nishikawa, K.-I., et al., Radiation from accelerated particles in relativistic jets with shocks and shear-flow, 12th International School/Symposium for Space Simulations, Prague, July 3-10, 2015 (talk)
49. Nishikawa, K.-I., et al., Radiation from Particles Accelerated in Relativistic Jet Shocks and Shear-flows, 2014 Fermi Symposium, Nagoya, Japan, October 20 - 24, 2014 (poster)
48. Nishikawa, K.I., et al., Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection, The 4th High Energy Phenomena in Relativistic Outflows (HEPRO IV) meeting was hold in Heidelberg, July 23-26, 2013 (talk)
47. Nishikawa, K.I., et al., Current-Driven Kink Instability in Magnetically Dominated Rotating Relativistic Jet, The 4th High Energy Phenomena in Relativistic Outflows (HEPRO IV) meeting was hold in Heidelberg, July 23-26, 2013 (poster)
46. Nishikawa, K.-I., et al., Radiation from relativistic jets from particles accelerated by shocks, shear-flows, and reconnection, The Innermost Regions of Relativistic Jets and Their Magnetic Fields. Granada, Spain. June 10 - 14, 2013 (talk)
45. Nishikawa et al., Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection, 4th International Fermi Symposium, Monterey, CA, October 28 - November 2, 2012 (talk)

44. Nishikawa et al., Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection, Gamma Ray Burst 2012, Marbella, Spain, October 8 - 12, 2012 (poster)
43. Nishikawa, et al., Radiation From Accelerated Particles in Shocks and ReconNECTIONS, Rattle and Shine: Gravitational Wave and Electromagnetic Studies of Compact Binary Mergers, Santa Barbara, CA, July 30 - August 3, 2012, (poster) (<http://online.kitp.ucsb.edu/online/chirps-c12/>)
42. Nishikawa et al., Radiation from accelerated particles in shocks and reconnections, Gamma-Ray Bursts 2012 Conference, Munich, Germany, May 7 - 11, 2012 (poster)
41. Nishikawa et al., Radiation from accelerated particles in shocks and reconnections, 5th Isradynamics Conference: Dynamical Processes in Space and Astrophysical Plasmas, Jerusalem, Israel, April 29 - May 7, 2012 (talk)
40. Nishikawa et al., Radiation from accelerated particles in shocks and reconnections, Death of Massive Stars: Supernovae and Gamma-Ray Bursts, Nikko, Japan, March 12 - 16, 2012 (poster)
39. Nishikawa et al., Radiation from accelerated particles in shocks and reconnections, Time Domain Astrophysics with Swift, Clemson, South Carolina, October 24 - 26, 2011 (poster)
38. Hardee et al., Current Driven Instability of a SUB-ALFVÉNIC Relativistic Jet, High Energy Phenomena in Relativistic Outflows III, Barcelona, Spain, June 27 - July 1, 2011 (poster)
37. Mizuno et al., Relaxation of Pulsar Wind Nebula via Current-Driven Kink Instability, High Energy Phenomena in Relativistic Outflows III, Barcelona, Spain, June 27 - July 1, 2011 (poster)
36. Mizuno et al., Magnetic Field Amplification by Relativistic Shocks in an Inhomogeneous Medium, High Energy Phenomena in Relativistic Outflows III, Barcelona, Spain, June 27 - July 1, 2011 (poster)
35. Nishikawa et al., Simulation of Relativistic Jets and Associated Self-consistent Radiation, High Energy Phenomena in Relativistic Outflows III, Barcelona, Spain, June 27 - July 1, 2011 (talk)
34. Nishikawa et al., Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, Gamma Ray Bursts 2010 Conference, November 1 - 4, 2010, Annapolis, MD (poster)
33. Nishikawa et al., Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, IAU Symposium 275: Jets at all Scales, Buenos Aires, Argentine, September 13 - 17, 2010 (talk)
32. Nishikawa, K.-I. et al., The CD Kink Instability in Magnetically Dominated Relativistic Jets, 38th COSPAR Scientific Assembly, 18 - 25 July 2010, Bremen, Germany (poster)
31. Nishikawa, K.-I. et al., Rapid Variability Generated at Relativistic Shocks Simulated by Particle-in-Cell Code, 38th COSPAR Scientific Assembly, 18 - 25 July 2010, Bremen, Germany (talk)
30. Nishikawa- K.-I., Radiation for GRB Prompt Emission and Afterglows, 38th COSPAR Scientific Assembly, 18 - 25 July 2010, Bremen, Germany (talk)
29. Nishikawa, K.-I., Impact of the IMF Rotation from Northward to Dawnward on Cusp Boundary Formation and Particle Entries: Large-scale Global 3D Full Particle Simulation, 38th COSPAR Scientific Assembly, 18 - 25 July 2010, Bremen, Germany (talk)
28. Nishikawa, K.-I. et al. Simulation of Relativistic Shocks and Associated Self-consistent Radiation, Proceedings of Deciphering the Ancient Universe with Gamma-Ray Bursts, April 2010 (talk)

27. Mizuno, Y. et al. Magnetic Field Amplification by Relativistic Shocks in Turbulent Medium, Deciphering the Ancient Universe with Gamma-Ray Bursts, April 2010 (poster)
26. Nishikawa, K.-I. et al. Simulations of Relativistic Shocks and Associated Self-consistent Radiation, 2010 AAS HEAD Meeting, February, 2010 (poster)
25. Hardee, P. et al. The CD Kink Instability in Magnetically Dominated Relativistic Jets, 2010 AAS HEAD Meeting, February 2010 (poster)
24. Mizuno, Y. et al. Effects of Instabilities in Relativistic Jets, 22nd Rironkon Symposium, December 2009 (poster)
23. Nishikawa, K.-I., J. Niemiec, M. Medvedev, B. Zhang, P. Hardee, Y. Mizuno, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, J. F. Fishman, Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, APCT, Shock Waves, Turbulence, and Particle Acceleration, Nov. 18 - 21, 2009, Pohang, Korea (talk)
22. Nishikawa, K.-I., J. Niemiec, B. Zhang, M. Medvedev, P. Hardee, Y. Mizuno, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, J. F. Fishman, Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, 2009 Fermi Symposium, 2-5 November 2009 (poster)
21. Nishikawa, K.-I., J. Niemiec, M. Medvedev, B. Zhang, P. Hardee, Y. Mizuno, A. Nordlund, J. Frederiksen, H. Sol, M. Pohl, D. H. Hartmann, J. F. Fishman, Simulation of relativistic shocks and associated radiation from turbulent magnetic fields, High Energy Phenomena in Relativistic Outflows II, Buenos Aires, Argentina, October 26 - 30, 2009 (talk)
20. Mizuno, Y. et al. Current-Driven Kink Instability in Relativistic Jets, High Energy Phenomena in Relativistic Outflows II, Buenos Aires, Argentina, October 26 - 30, 2009 (poster)
19. Mizuno, Y. et al. Magnetohydrodynamic Effects in Relativistic Ejecta, High Energy Phenomena in Relativistic Outflows II, Buenos Aires, Argentina, October 26 - 30, 2009 (talk)
18. Nishikawa, K.I. et al., Simulation of Relativistic Shocks and Associated Radiation from Turbulent Magnetic Fields, Nonlinear Processes in Astrophysical Plasmas: Particle Acceleration, Magnetic Field Amplification, and Radiation Signatures, Santa Barbara, CA, September 28, 2009 - October 2, 2009 (talk)
17. Nishikawa, K.-I., Medvedev, M., Zhang, B., Hardee, P., Niemiec, J., Mizuno, Y., Sol, H., Nordlund, Å, Frederiksen, J., Sol, H., Pohl, M., Hartmann, D. H., Oka, M., and Fishman, G. J., Radiation from relativistic shocks with turbulent magnetic fields, Neutron Stars & Gamma Ray Bursts, 30 March 2009 - 4 April 2009 (talk)
16. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Medvedev, M., Zhang, B., Sol, H., Niemiec, J., Nordlund, Å, Frederiksen, J., Lyubarsky, Y., Hartmann, D. H., and Fishman, G. J., Microscopic Processes on Radiation from Accelerated Particles in Relativistic Jets, 213th AAS meeting, January 4 - 8, 2009 (talk)
15. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Medvedev, M., Zhang, B., Nordlund, Å, Frederiksen, J., Sol, H., Lyubarsky, Y., Hartmann, D. H., and Fishman, G. J., Microscopic processes in relativistic jets, Kinetic Modeling of Astrophysical Plasmas, October 5-9, 2008, Krakow, Poland (talk)
14. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Zhang, B., Medvedev, M., Nordlund, Å, Frederiksen, J., Hartmann, D. H., Fishman, G. J., Preece, R., New Relativistic Particle-In-Cell Simulationff Studies of Prompt and Early Afterglows from GRBs, 37th COSPAR Scientific Assembly, 13 - 20 July 2008, Montreal, Canada (talk)
13. Nishikawa, K.-I., Cai, D., Lembege, B., 3D Particle simulations of the solar wind terrestrial magnetosphere interaction: impact of the IMF rotation on the magnetosphere dynamic, 37th COSPAR Scientific Assembly, 13 - 20 July 2008, Montreal, Canada (talk)

12. Mizuno, Y., Hardee, P., Nishikawa, K.-I., 3D RMHD Simulations of Magnetized Spine-Sheath Relativistic Jets, 37th COSPAR Scientific Assembly, 13 - 20 July 2008, Montreal, Canada (talk)
11. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Medvedev, M., Sol, H., Hartmann, D. H., Fishman, G. J., Relativistic Particle-In-Cell Simulations of Particle Acceleration in Relativistic Jets 37th COSPAR Scientific Assembly, 13 - 20 July 2008, Montreal, Canada (talk)
10. Nishikawa, K.-I., Niemiec, J., Sol, H., Medvedev, M., Zhang, B., Hardee, P., Mizuno, Y., Hartmann, D. H., Fishman, G. J., Relativistic Particle-In-Cell Simulation Studies of Relativistic Jets and associated radiation, 4th Heidelberg International Symposium on High Energy Gamma-Ray Astronomy, July 7-11, 2008 (poster)
9. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Medvedev, M., Zhang, B., Sol, H., Hartmann, D. H., Fishman, G. J., Relativistic Particle-In-Cell Simulation Studies of Relativistic Jets, Dynamical Processes in Space Plasmas, Israel, 11-19 May 2008 (talk)
8. Nishikawa, K.-I., Hardee, P., Mizuno, Y., Medvedev, M., Zhang, B., Fishman, G. J., Radiation from relativistic jets, Workshop on Blazar Variability across the Electromagnetic Spectrum, École polytechnique in Palaiseau, April 22 - 25, 2008 (poster)
7. Nishikawa, K.-I., P. Hardee, Y. Mizuno, J. F. Fishman, R. Preece, New Relativistic Particle-In-Cell Simulation Studies of Prompt and Early Afterglows from GRBs, The 10th HEAD meeting, Los Angeles, March 31 - April 3, 2008 (talk)
6. Nishikawa, K.-I., E. Ramirez-Ruiz, Y. Mizuno, P. Hardee, C. B. Hededal & G.J. Fishman, Particle acceleration, magnetic field generation, and associated emission in collisionless relativistic jets, 7th European Workshop on Collisionless Shocks, November 7 - 9, 2007 (talk)
5. Nishikawa, K.-I., E. Ramirez-Ruiz, P. Hardee, Y. Mizuno, M. Medvedev, C. B. Hededal & G. J. Fishman, Particle acceleration, magnetic field generation, and associated emission in collisionless relativistic jets, High Energy Phenomena in Relativistic Outflows, September 24 - 28, 2007 (talk)
4. Nishikawa, K.-I., Y. Mizuno, P. Hardee, C. B. Hededal & G.J. Fishman, 3-D RPIC simulations of relativistic jets: Particle acceleration, magnetic field generation, and emission, Microquasars and Beyond, Como, Italy, September 18 - 22, 2006 (talk)
3. Mizuno, Y., K.-I. Nishikawa, S. Koide, P. Hardee, & G.J. Fishman, Newly-Developed 3D GRMHD Code and its Application to Jet Formation, NEW Frontiers in Numerical Relativity, Albert Einstein Institute, Golm, Germany, July 17 - 21, 2006 (poster)
2. Nishikawa, K.-I., Particle Acceleration in Jets, Supernova and Gamma-Ray Burst Remnants, KITP, UCSB, February 6 - 10, 2006 (poster)
1. Nishikawa, K.-I., Particle Acceleration, Magnetic Field Generation and Emission in Relativistic Jets, Relativistic Jets: The Common Physics of AGN, Microquasars and Gamma-Ray Bursts, University of Michigan, 14-17 December 2005 (talk)

Seminar (since 2009 as of May 18, 2016)

15. Particle-In-Cell Simulations of Astrophysical Relativistic Jets, Alabama A & M University, March 31, 2016
14. Global simulations of relativistic jets with shocks and shear-flow, Washington University in St. Louis, October 19, 2015
13. Global simulations of relativistic jets with shocks and shear-flow, NBI-University of Copenhagen, August 6, 2015
12. Radiation from acceleration Particles ffin relativistic jets with shocks and shear-flow, Goethe University Frankfurt, June 2, 2015

11. Radiation from accelerated particles in relativistic jets with shock and shear-flow, RIKEN, Japan, October 17, 2014
10. Radiation from accelerated particles in relativistic jets in AGN and GRB, Seminar, Institute of Space Science, Bucharest, July 29, 2013
9. Radiation from accelerated particles in relativistic jets with shocks, shear-flow, and reconnection, Seminar, Instituto de Astrofísica de Andalucía (IAA-CSIC), October 16, 2012
8. Radiation from accelerated particles in shocks and reconnections, Physics Colloquium, University of Tokyo, March 26, 2012
7. Radiation from accelerated particles in shocks and reconnections, Physics Colloquium, KEK, March 23, 2012
6. Radiation from accelerated particles in shocks and reconnections, Physics Colloquium, University of Tsukuba, March 20, 2012
5. Radiation from accelerated particles in shocks and reconnections, Physics Colloquium, UNLV, September 30, 2011
4. Magnetospheric processes, Space Weather Camp 2011, Huntsville, AL, August 10, 2011
3. Simulation of Relativistic Shocks and Associated Self-consistent Radiation, Colloquium at Korean Astronomy and Space Science Institute, September 1, 2010
2. Simulation of Relativistic Shocks and Associated Radiation from Turbulent Magnetic fields, Department of Physics, UAHuntsville, October 20, 2009
1. Radiation from relativistic shocks with turbulent magnetic fields, Seminar at Department of Physics at Beijing University, May 25, 2009