

Listing of Accelerator Physics Division Reports by Year and Category for the period June 1987 - October 1991

P. Manning

November 1991

Collider Accelerator Department
Brookhaven National Laboratory

U.S. Department of Energy

USDOE Office of Science (SC)

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AD/AP-31

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Accelerator Physics Technical Note No. 31

**Listing of Accelerator Physics Division
Reports by Year and Category
for the period June 1987 - October 1991**

compiled by P.M. Manning

November 1991

**A. Journals, Conference Papers, Reports,
Technical Notes**

Listing of Accelerator Physics Division Reports by Year and Category

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YR	BNL ID Other ID	Full Title	Author(s)
<u>Journals</u>			
87	BNL-39262	Second order perturbation theory for accelerators. Particle Accelerators <u>22</u> , 205-230.	Parsa Z, Tepikian S, Courant E
88	BNL-39454	Beam behavior studies in accelerators using perturbation theory. Particle Accelerators <u>22</u> , No. 4, 307-318.	Parsa Z, Tepikian S
88	BNL-40870 SSC-142	Leading order hard edge fringe fields effects exact in $(1+\delta)$ and consistent with Maxwell's equations for rectilinear magnets. Nucl. Instr. and Methods in Physics Research, <u>A269</u> , 474-482.	Forest E, Milutinovic J
89	Done at U. Mich	Acceleration of polarized protons to 22 GeV/c and the measurement of spin-spin effects in $p\uparrow + p\uparrow \rightarrow p + p$. Phys. Rev. <u>D39</u> , 45-85.	Khiari F, Courant E, Lee SY, Tepikian S, et al.
89	BNL-41361	The effect of longitudinal space charge on multi-turn capture in the AGS Booster. Particle Accelerators <u>24</u> , 211-222	Wei J, Lee SY, Ruggiero AG
89	BNL-42452	Feynman-Monte Carlo calculations of electron capture at relativistic collider energies. Phys. Lett. B.	Rhoades-Brown MJ, Bottcher C, Strayer MR
89	BNL-42545	Electromagnetic phenomena and collider performance at ultra-relativistic energies. Nucl. Instr. and Methods in Physics Res. B: Beam interactions with materials and atoms.	Rhoades-Brown MJ, Bottcher C, Strayer MR
89	BNL-43175	Impedances and instabilities of the AGS booster. Particle Accelerators <u>28</u> , 65-70.	Ruggiero AG
89	BNL-42653	Space charge limits in proton synchrotrons. Nucl. Instrum. & Methods in Physics Research, <u>A281</u> , 413-425.	Parzen G

YR	BNL ID Other ID	Full Title	Author(s)
90	BNL-42728	The tolerance of imperfections in high-energy circular accelerators for polarized protons. Phys. Rev. Vol. 41, No. 1, 292-302.	Lee SY, Courant ED
90	BNL-44852	A multipole expansion for the field of vacuum chamber eddy currents. Nucl. Instr. and Methods in Physics Res. A 300 (1991) 151-158.	Lee SY
90	BNL-45260	Canonical perturbation approach to the non-linear synchrotron motion at transition energy. Submitted to Particle Accelerator.	Wei J
91	BNL-45881	On the condition of coherent instability at the transition energy. Submitted to Particle Accelerator.	Wei J

Conference Papers

87	BNL-40268	Choice of parameters for linear colliders in multibunch mode. Proc. 1987 ECFA-CAS/CERN-IN2P3-IRF/CEA-EPS Workshop, Orsay, France, June 29-July 4, 1987, CERN 87-11 & ECFA 87-110, Ed. S. Turner, Vol. I, 161-180.	Claus J
88	BNL-41651	Intrabeam scattering. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 113-132.	Parzen G
88	BNL-41655	Transition energy problems in RHIC. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 170-187.	Lee SY, Wei J
88	BNL-41661	Single beam instabilities in RHIC. Proc. Workshop on RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 143-154.	Ruggiero AG
88	BNL-41664	Intrabeam scattering results for a high frequency rf system. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-23, 1988, 279-284.	Parzen G

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88	BNL-41665	Summary of RHIC workshop - rf interaction group. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 307-312.	Griffin JE, Boussard D, Brennan JM, Cottingham JG, Raka E, Ratti A, Wei J
88	BNL-41666	Summary of workshop. Proc. Workshop on RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-23, 1988, 1-2.	Ruggiero AG
88	BNL-41667	Space charge effect at transition energy and the transfer of rf system at top energy. Proc. Workshop on RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 339-366.	Wei J, Lee SY
88	BNL-41668	Mini- β insertion and luminosity for the RHIC lattice. Proc. Workshop on RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 269-275.	Lee SY
88	BNL-	Switch over to the high frequency rf system near transition. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 315-327.	Brennan JM, Wei J
88	BNL-	Space charge effect at transition energy and the transfer of rf system at top energy. Proc. Workshop on RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 339-366.	Wei J, Lee SY
88	BNL-41662	Report of the stochastic cooling subgroup of the RHIC workshop. Proc. Workshop on the RHIC Performance, Brookhaven National Laboratory, Upton, NY, March 21-26, 1988, 289-297.	Boussard D, Claus J, Di Massa G, Marriner J, Milutinovic J, Shafer, R.
88	BNL-41328 ABS-40944	The effect of coupling on intrabeam scattering. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari, Vol. 2, 821-823, World Scientific Publishing Co., Pte. Ltd. (1989).	Parzen G

YR	BNL ID Other ID	Full Title	Author(s)
88	BNL-41360 ABS-40949	Nonlinear synchrotron motion near transition energy in RHIC. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari, Vol. 2, 764-766.	Lee SY, Wei J
88	BNL-41363 ABS-40945	Beam-beam interactions and luminosity considerations in RHIC. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari,	Rhoades-Brown MJ
88	BNL-41366 ABS-40947	The RHIC lattice. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari, Vol. 2, 773-775, World Scientific Publishing Co., Pte. Ltd. (1989).	Lee SY, Claus J, Courant ED, Dell GF, Hahn H, Parzen G, Ruggiero AG
88	BNL-41392	A study of the coupling resonances in the AGS Booster. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari, Vol. 2, 770-772, World Scientific Publishing Co., Pte. Ltd. (1989).	Lee SY, Tepikian S Zhao XF
88	BNL-41393 ABS-40948	Tracking studies on a RHIC lattice configuration for crossing the transition energy. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988., (got lost).	Dell GF, Parzen G
88	BNL-41394 ABS-40943	Code comparison for accelerator design and analysis. Proc. European Particle Accelerator Conf., Rome, Italy, June 7-11, 1988, Ed. S. Tazzari, Vol. 2, 818.	Parsa Z
88	BNL-42089	Accelerator physics in RHIC. Proc. 1988 Summer Study on High Energy Physics in the 1990's, Snowmass, CO, June 27-July 15, 1988, Ed. S. Jensen, 473-476.	Claus J
88	BNL-42176	Study of long term stability of betatron motion in the SSC. Proc. 1988 Summer Study on High Energy Physics in the 1990's, Snowmass, CO, June 27-July 15, 1988, Ed. S. Jensen, 557-559.	Dell GF

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88	BNL-42177	Dynamic aperture for a 1.8 TeV p-bar collider for the FNAL tunnel. Proc. 1988 Summer Study on High Energy Physics in the 1990's, Snowmass, CO, June 27-July 15, 1988, Ed. S. Jensen, 523.	Dell GF
88	BNL-41998	Snake resonances. Proc. 8th Intern. Symp. High Energy Spin Physics, Minneapolis, MN, Sept. 12-17, 1988, Conf. Proc. No. 187, Vol. 2, 1450-1460.	Tepikian S
88	BNL-42074	Study of spin resonances in the accelerators with snakes. Proc. 8th Intern. Symp. High Energy Spin Physics, Minneapolis, MN, Sept. 12-17, 1988.	Lee SY
88	BNL-42126	Helical siberian snakes. Proc. 8th Intern. Symp. High Energy Spin Physics, Minneapolis, MN, Sept. 12-17, 1988.	Courant ED
89	BNL-42545	Electromagnetic phenomena and collider performance at ultra-relativistic energies. Proc. Workshop on Highly Charged Ions: New Physics & Advanced Techniques, Berkeley, CA, March 13-15, 1989.	Rhoades-Brown MJ, Bottcher C, Strayer MR
89	BNL-41821	Intrinsic and resonance space charge limits. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 818-820.	Parzen G
89	BNL-41842	Effect of the induced voltage on the bunch motion at the transition energy. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1988, Vol. 2, 1169-1171.	Lee SY, Wei J
89	BNL-41843 AD/RHIC-53	Mini- β insertion and luminosity for the RHIC lattice. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 3, 1795-1797.	Lee SY, Dell GF, Hahn H, Parzen G, Ruggiero AG
89	BNL-41844	The heavy ion injection scheme for RHIC. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 1, 663.	Rhoades-Brown MJ

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89	BNL-41845	Emittance growth, tune shift, and the bunched-beam, bunched-beam interaction. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 929-931.	Rhoades-Brown MJ, Tepikian S
89	BNL-41846	Disassociation of electrons from partially stripped ion beams due to strong magnetic fields. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 900-902.	Tepikian S, Lee SY
89	BNL-41854 AD/RHIC-55	Studies on magnet shuffling for RHIC. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 1388-1390.	Dell GF
89	BNL-41867	Comparison of accelerator codes for a RHIC lattice. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 1373-1375.	Milutinovic J, Ruggiero AG
89	BNL-41868	AGS-Booster orbit and resonance correction. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 1367-1369.	Milutinovic J, Ruggiero AG, Tepikian S, Weng WT
89	BNL-41869	General analysis of beam position monitors. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 3, 1565-1567.	Di Massa G, Ruggiero AG
89	BNL-41870	Closed orbit analysis for RHIC. Proc. 1989 Particle Accelerator Conf., Chicago, IL, March 20-23, 1989, Vol. 2, 1370-1372.	Milutinovic, Ruggiero AG
89	BNL-42954	Tangent map analysis of the beam-beam interaction. Proc. 3rd Advanced ICFA Beam Dynamics Workshop, Novosibirsk, USSR, May 29-June 3, 1989.	Lee SY, Tepikian S
89	BNL-43008	What and why are siberian snakes? 2nd Meeting on Siberian Snake Test at IUCF Cooler Ring, Bloomington, IN, June 22-23, 1989.	Courant ED
89	BNL-45749	The BNL heavy-ion beam facility. Proc. U.S. Particle Accelerator School, Upton, NY, June 24-August 4, 1989.	Ruggiero AG

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89	BNL-43279	Landau damping due to tune spreads in betatron amplitude and momentum. Proc. XIV Intern. Conf. on High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerators No. 28, 71-76.	Lee SY, Tran P, Weng WT
89	BNL-43204	Microwave instability near transition energy. XIV Intern. Conf. on High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerators No. 28, 77-82.	Wei J, Lee SY
89	BNL-43143	Polarized proton beams. Proc. XIV Intern. Conf. on High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerators No. 32, 127-137.	Courant ED
89	BNL-43175	Impedances and instabilities of the AGS booster. Proc. XIV Intern. Conf. High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerator No. 28, 65-70.	Ruggiero AG
89	BNL-43200	Studies on the chromaticity correction and dynamic aperture of the AGS Booster. Proc. XIV International Conf., on High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerator No. 27, 227-232.	Dell GF, Lee SY, Parzen G
89	BNL-43204	Microwave instability near transition energy. Proc. XIV International Conf., on High Energy Accelerators, Tsukuba, Japan, August 22-26, 1989, Ed. D. Keefe, Particle Accelerator No. 28, 77-82.	Wei J, Lee SY
89	BNL-43394	The evolution of high energy accelerators. Proc. Lecture for Goudsmith Professorship, University of Michigan, Ann Arbor, MI, Oct. 11, 1989.	Courant ED
90	BNL-44563	Status of the relativistic heavy ion collider. DPF 90, Houston, TX, January 2, 1990.	Lee SY

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90	BNL-52273	Strong betatron focussing in linearly polarized wigglers. Proc. of the Workshop Prospects for a 1Å Free-Electron Laser, Sag Harbor, NY, April 22-27, 1990, Ed. Juan C. Gallardo, 94-117.	Claus J
90	BNL-43678	Evolution of longitudinal equilibrium distribution in the adiabatic regime. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1615-1617.	Wei J, Lee SY, Ruggiero AG
90	BNL-43679	Beam ν -spread due to field errors in RHIC. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1512-1514.	Parzen G, Dell GF, Hahn H, Ruggiero AG
90	BNL-43680	The decapole correction system at RHIC. Proc. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1467-1469.	Claus J, Dell GF, Hahn H, Parzen G, Rhoades-Brown MJ, Ruggiero AG
90	BNL-43681	On the longitudinal coupling impedance of a toroidal beam tube. Proc. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1043-1045.	Hahn H, Tepikian S
90	BNL-43683	Comparison of multipole expansion and exact form of the eddy current field of the AGS Booster. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1768-1770.	Dell GF, Lee SY, Parzen G
90	BNL-43684	A multipole expansion for the field of vacuum chamber eddy currents. Proc. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1771-1773.	Lee SY
90	BNL-43685	Intrinsic space charge resonances and the space charge limit. 2nd European Particle Accelerator Conf., Acropolis, Nice - France, June 12-16, 1990, Vol. 2, 1658-1660.	Parzen G

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90	BNL-44899	Summary report on the transition crossing for MI. Proc. Fermilab III Instabilities Workshop, Batavia, IL, June 25-29, 1990.	Lee SY
90	BNL-44904	Transition crossing the main injector. Proc. Fermilab III Instabilities Workshop, Batavia, IL, June 25-29, 1990.	Wei J
90	BNL-45013	The new conceptual design of snakes and spin rotators in RHIC. 9th Intern. Symposium on High Energy Spin Physics, Bonn, Germany, Sept. 6-15, 1990.	Lee SY, Courant ED
90	BNL-45272	Collective effects in short bunches - summary of the working group on protons. 4th ICFA Beam Dynamics Workshop, Tokyo, Japan, Sept. 22-29, 1990.	Ruggiero AG
91	BNL-45356 AD/RHIC-87	The transverse damper system for RHIC. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Xu J, Claus J, Raka E, Ruggiero AG, Shea TJ
91	BNL-45513 AD/RHIC-88	Perturbation treatment of the longitudinal coupling impedance of a toroidal beam tube. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Hahn H, Tepikian
91	BNL-45514 AD/RHIC-89	Comparison between coasting and bunched beams on optimum stochastic cooling and signal suppression. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Wei J
91	BNL-45515 AD/RHIC-90	Beam life-time with intrabeam scattering and stochastic cooling. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Wei J, Ruggiero AG
91	BNL-45516 AD/RHIC-91	First turn around strategy for RHIC. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Milutinovic J, Ruggiero AG
91	BNL-45517 AD/RHIC-92	Beta functions in the presence of linear coupling. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Parzen G

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91	BNL-45518 AD/RHIC-93	Tune splitting in the presence of linear coupling. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Parzen G
91	BNL-45519 AD/RHIC-94	Dynamic aperture effects due to linear coupling. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, Ca, May 6-9, 1991.	Parzen G
91	BNL-45520 AD/RHIC-95	Aperture determination by long term & multiparticle tracking. Proc. 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Dell GF, Parzen G
91	BNL-45521 AD/RHIC-96	Correction of skew-quadrupole errors in RHIC. Proc. of 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Dell GF, Hahn H, Lee SY, Parzen G, Tepikian S
91	BNL-45522 AD/RHIC-97	Beam-beam interaction and high order resonances. Proc. of 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Tepikian S, Lee SY
91	BNL-45523 AD/RHIC-98	Analytic closed orbit analysis for RHIC insertion. Proc. of 1991 IEEE Particle Accelerator Conf., San Francisco, CA, May 6-9, 1991.	Lee SY, Tepikian S
91	BNL-46751	Exact analysis to any order of the linear coupling problem in the thin lens model. Proc. Fifth ICFA Advanced Beam Dynamics Workshop, Corpus Christi, TX, Oct. 3-8, 1991.	Ruggiero AG
91	BNL-46800	Tune shifts and beta function shifts due to linear coupling. Proc. of Fifth ICFA Advanced Beam Dynamics Workshop, Corpus Christi, TX, Oct. 3-8, 1991.	Parzen G

Reports

88	BNL-41465	Transverse space-charge effects in the AGS Booster during injection. Informal Report	Parsa Z
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88	BNL-41604	Proc. Workshop on the RHIC Performance, March 21-26, 1988.	Ruggiero AG, et al
88	BNL-52169	Beam position monitor analysis. Formal Report.	Di Massa G, Ruggiero AG
90	BNL-45268 AD/RHIC-82	The residual tune splitting in the presence of linear coupling. Informal Report.	Parzen G
90	BNL-45269 AD/RHIC-81	Intrabeam scattering and the beam life-time. Informal Report.	Wei J, Ruggiero AG
90	BNL-52248	Snakes and Spin Rotators. Formal Report.	Lee SY
91	BNL-45923 AD/RHIC-84	Transition crossing in the RHIC. Informal Report.	Wei J
91	BNL-45958 AD/RHIC-85	Long term stability in RHIC. Informal Report.	Parzen G
91	BNL-45959 AD/RHIC-86	Populating 114 buckets by bunch shifting - study on Cottingham's scheme. Informal Report.	Wei J, Ruggiero AG
91	BNL-46415 AD/RHIC-100	Theory of the tune shift due to linear coupling. Informal Report.	Parzen G
91	BNL-46416 AD/RHIC-101	Properties of a symmetric RHIC insertion. Informal Report.	Lee SY
91	BNL-46459 AD/RHIC-102	Theory of the beta function shift due to linear coupling. Informal Report.	Parzen G

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<u>Technical Notes</u>			
87	AD/AP-1	Helical siberian snakes.	Courant ED
87	AD/AP-2	Network and communications.	Parsa Z
87	AD/AP-3	Information on IBM 3090.	Parsa Z
87	AD/AP-4	Guide to VAX, CDC and IBM 3090.	Parsa Z
87	AD/AP-5	AGS-Booster and RHIC lattices with racetrack.	Parsa Z
87	AD/AP-6	Nonlinear effects and chromaticity studies for the AGS booster.	Parsa Z
87	AD/AP-7	Second order perturbation calculation in energy exchange of free electron electron lasers.	Wei J, Lee SY
87	AD/AP-8	Accelerator physics code comparison.	Parsa Z
87	Booster TN-83	The effect of sextupole fields on the space charge limit.	Parzen G
87	Booster TN-98	Longitudinal stability of individual bunches in the AGS-booster.	Ruggiero AG
87	Booster TN-102	Simulation of the multiturn heavy-ion injection on the booster.	Wei J, Lee SY
87	AD/RHIC-28	RHIC decapole correction magnet requirements.	Dell GF, Hahn H, Parzen G, Ruggiero AG
87	AD/RHIC-32	Source current into the AGS an analysis of the RHIC front end injection.	Rhoades-Brown M, Ruggiero AG

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87	AD/RHIC/AP-47	Analysis of the decapole systematic error in the dipoles and of the correctors.	Ruggiero AG
87	AD/RHIC/AP-48	Vacuum pipe heating in RHIC.	Ruggiero AG
87	AD/RHIC/AP-49	Intrabeam scattering with coupling.	Parzen G
87	AD/RHIC/AP-51	Effects of random quadrupole field errors and their correction.	Parzen G
87	AD/RHIC/AP-52	Tune spreads and tune splitting due to random field errors in RHIC.	Parzen G
87	AD/RHIC/AP-54	Dynamic aperture of the RHIC lattice with γ_t jump quadrupoles.	Parzen G
88	Booster TN-104	Review of space charge calculations.	Ruggiero AG
88	Booster TN-107	Closed orbit analysis for the AGS Booster.	Ruggiero AG
88	Booster TN-112	Effects of quadrupole gradient errors in the AGS booster.	Milutinovic J, Ruggiero AG
88	Booster TN-113	An alternative injection scheme for heavy ions into the Booster.	Rhoades-Brown M, Ruggiero AG
88	AD/RHIC/RD-4	Intrabeam scattering results for a high frequency rf system.	Parzen G
88	AD/RHIC/RD-5	Simulation of transition and transfer for RHIC.	Wei J
88	AD/RHIC/RD-8	RF systems overview.	Ruggiero AG
88	AD/RHIC-33	The role of an intermediate linac in matching the h=1 to h=3 heavy ion injection cycle of the Booster.	Rhoades-Brown MJ

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88	AD/RHIC-35	Accelerating uranium in RHIC - I. The problems and role of an intermediate linac.	Rhoades-Brown MJ
88	AD/RHIC-38	Accelerating uranium in RHIC - II. Surviving the AGS vacuum.	Rhoades-Brown MJ
88	AD/RHIC-40	Resonant excitation for RHIC injection kicker.	Claus J
88	AD/AP-9	Comparison of accelerator codes for a RHIC lattice.	Milutinovic J, Ruggiero AG
88	AD/AP-10	The longitudinal coupling impedance of a toroidal vacuum chamber in the low frequency range.	Ruggiero AG
88	AD/AP-11	Beam position monitor.	Di Massa G, Ruggiero AG
88	AD/RHIC-41	Disassociation of electrons from partially stripped ion beams due to strong magnetic fields.	Tepikian S, Lee SY
88	AD/RHIC/AP-55	What is the emittance of the injected beam.	Parzen G
88	AD/RHIC/AP-56	Space charge coupling impedance for a straight and toroidal vacuum chamber.	Ruggiero AG
88	AD/RHIC/AP-57	Natural chromaticity of lattices.	Parzen G
88	AD/RHIC/AP-58	Emittances and 4 dimensional beam surfaces in RHIC.	Parzen G
88	Booster TN-115	RF capture of the AGS-Booster.	Wei J, Lee SY, Ruggiero AG
88	Booster TN-123	Effects of injection energy spread in rf capture on the booster.	Wei J, Lee SY
88	Booster TN-125	Random sextupole correction.	Tepikian S

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88	Booster TN-132	Skew quadrupole corrections.	Tepikian S
88	AD/RHIC-RD-12	Beam position monitor for RHIC.	Claus J
88	AD/RHIC-44	An alternative injection scheme for heavy ions into RHIC.	Rhoades-Brown MJ
88	AD/RHIC-45	Internal beam dump system for RHIC.	Claus J
88	AD/RHIC-47	Beam transfer from AGS to RHIC.	Claus J, Foelsche H
88	AD/RHIC-48	Effect of the induced voltage on the bunch motion at the transition energy.	Lee SY, Wei J
88	AD/RHIC/AP-60	Space charge mismatch for the transition energy crossing in the AGS and RHIC.	Ruggiero AG
88	AD/RHIC/AP-61	Review of RHIC correction system.	Parzen G
88	AD/RHIC/AP-62	Intrabeam scattering results for a high frequency rf system.	Parzen G
88	AD/RHIC/AP-63	Intrabeam scattering results for a high frequency rf system with tight rf buckets.	Parzen G
88	AD/RHIC/AP-64	Discussion of the rf parameters for RHIC.	Ruggiero AG
88	AD/RHIC/AP-65	Reducing the rf voltage swing by blowing up the initial energy spread.	Parzen G
88	AD/RHIC/AP-66	Intrabeam scattering results for a high frequency rf system.	Parzen G
88	AD/RHIC/AP-67	Longitudinal motion near unstable fixed-point.	Wei J, Lee SY

YR	BNL ID Other ID	Full Title	Author(s)
88	AD/RHIC/AP-68	Reducing the rf voltage requirement by blowing up the initial emittance.	Parzen G
88	Booster TN-111	Eddy current multipoles and sextupole configuration.	Dell GF
88	Booster TN-113	An alternative injection scheme for heavy ions into the booster.	Rhoades-Brown MJ, Ruggiero AG
88	Booster TN-119	Coordinates of magnet survey markers and tunnel survey monuments for the AGS booster.	Dell GF
88	Booster TN-127	Effect of resonances on the space charge limit.	Parzen G
88	AD/RHIC/AP-69	Intrabeam scattering with stochastic cooling.	Parzen G
88	AD/RHIC/AP-70	Acceptance of $\beta^*=2\text{m}$, 3m and 6m lattices with reduced aperture BC1(17cm) and BC2(8cm) dipoles.	Dell GF
88	AD/RHIC/AP-71	Linear random quadrupole effects and their correction.	Parzen G
88	AD/RHIC/AP-72	ν -splitting due to random skew quadrupole fields.	Parzen G
88	AD/RHIC/AP-73	Effect of sextupole fields on the dynamic aperture.	Parzen G
88	AD/RHIC/AP-74	ν spreads due to systematic field errors including b_3, b_4 and a_1 .	Parzen G
89	Booster TN-135	Quadrupole correctors for the half-integer stopbands in the booster.	Ruggiero AG
89	AD/RHIC-49	Disassociation of electrons from partially stripped ion beams due to strong magnetic fields.	Tepikian S, Lee SY
89	AD/RHIC-51	Closed orbit analysis for RHIC.	Milutinovic J, Ruggiero AG

YR	BNL ID Other ID	Full Title	Author(s)
89	AD/RHIC-52	Comparison of accelerator codes for a RHIC lattice.	Milutinovic J, Ruggiero AG
89	AD/RHIC-53	Mini- β insertion and luminosity for the RHIC lattice.	Lee SY, Dell GF, Hahn H, Parzen G, Ruggiero AG
89	AD/RHIC-54	Emittance growth, tune shift and the bunched-beam, bunched-beam interaction.	Rhoades-Brown MJ, Tepikian S
89	AD/RHIC-55	Studies on magnet shuffling for RHIC.	Dell GF
89	AD/RHIC-56	AGS booster orbit and resonance correction.	Milutinovic J, Ruggiero AG, Tepikian S, Weng WT
89	AD/RHIC-58	Tolerances on systematic field errors in RHIC magnets.	Dell GF, Hahn H, Parzen G, Rhoades-Brown MJ, Ruggiero AG
89	AD/RHIC-59	Luminosity depletion in a collider for heavy ions beyond RHIC energies.	Ruggiero AG
89	AD/RHIC-60	Effect of systematic sextupoles on the beam dynamics in the RHIC lattice.	Lee SY
89	AD/RHIC/AP-75	Dynamic aperture for lattices with some $\beta^*=2$ insertions.	Parzen G
89	AD/RHIC/AP-76	Dynamic aperture and the role of BC2.	Parzen G
89	AD/RHIC/AP-77	The crossing geometry of RHIC insertion.	Lee SY
89	AD/RHIC-AP-78	Closed orbit analysis for RHIC.	Milutinovic J, Ruggiero AG
89	AD/RHIC-AP-79	Possible orbit separator for the IP in RHIC.	Lee SY
89	AD/RHIC/AP-80	Loss of dynamic aperture due to random quadrupole errors.	Parzen G

YR	BNL ID Other ID	Full Title	Author(s)
89	AD/RHIC/AP-81	The residual ν -shift due to random skew quadrupole errors.	Parzen G
89	AD/RHIC/AP-82	Systematic multipoles in the dipoles and their effect on aperture and a ν -spread.	Parzen G
89	AD/RHIC/AP-83	Systematic multipoles in the quadrupoles and their effect on dynamic aperture and a ν -spread.	Parzen G
89	AD/RHIC/AP-84	ν -spread due to random field multipoles.	Parzen G
89	AD/RHIC/AP-85	Analytic evaluation of tune shift due to octupole correctors.	Rhoades-Brown MJ
89	AD/RHIC/AP-86	Comments on the effect of random errors.	Ruggiero AG
89	AD/AP-12	Multipole expansion for the eddy current correction.	Lee SY
89	AD/AP-14	Analysis of effects of closed orbit errors, quadrupole $\Delta K/K$ random errors and random quadrupole rotation errors for the SSC LEB.	Milutinovic J, Ruggiero AG
89	Booster TN-141	Dependence of the space charge limit on the choice of ν values.	Parzen G
89	Booster TN-149	The resonance correction scheme for the AGS Booster.	Tepikian S
89	Booster TN-150	Six dimensional tracking for H ⁻ injection.	Lee SY, Tepikian S
89	Booster TN-152	Dependence of the space charge limit on the choice of ν -values.	Parzen G
90	AD/RHIC/RD-14	The influence of the AGS beam parameters at the RHIC injection.	Xu J
90	AD/RHIC/RD-15	The possible method to measure Twiss parameters and emittance of the AGS ejected beam.	Xu J

YR	BNL ID Other ID	Full Title	Author(s)
90	AD/RHIC/RD-16	The low β waist in the beam transport line for the stripping foil SA.	Xu J
90	AD/RHIC-61	ν -spread due to random field errors.	Parzen G
90	AD/RHIC-63	Effect of the vertical bends in ATR transfer line on the polarized proton operation.	Lee SY, Courant ED
90	AD/RHIC-64	Closed orbit analysis for RHIC insertion.	Lee SY, Tepikian S
90	AD/RHIC-66	Analytic studies of decapole correction schemes.	Rhoades-Brown MJ, Hahn H
90	AD/RHIC-67	The effects of dipole twist on the closed orbit in RHIC.	Milutinovic J
90	AD/RHIC-68	The heavy ion stripping foil requirements between AGS and RHIC.	Rhoades-Brown MJ
90	AD/AP-15	Estimate of the coupling impedance and individual bunch instabilities for the low energy booster (SSC).	Ruggiero AG
90	AD/AP-16	Particle losses in RHIC due to intrabeam scattering out of the the momentum aperture.	Rhoades-Brown MJ, Claus J
90	AD/AP-17	Space charge effects in low energy booster.	Parzen G
90	AD/AP-18	Resonance correction for the SSC-LEB.	Tepikian S
90	AD/AP-19	Experimental cooling of bunched beams in FNALs accumulator ring.	Claus J
90	AD/AP-20	Tracking studies on a lattice for the SSC low energy booster.	Dell GF
90	AD/AP-21	Parameterization of transport and period matrices with x-y coupling.	Courant ED

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YR	BNL ID Other ID	Full Title	Author(s)
90	AD/RHIC/RD-18	The effect of the stripping foil SA on the injected beam of RHIC.	Xu J
90	AD/RHIC/RD-20	Definition of a_1 correctors.	Hahn H, Parzen G
90	AD/RHIC/RD-22	The improvement of the vertical dispersion matching of the beam transport line between AGS and RHIC.	Xu J
90	AD/RHIC/RD-23	The calculation of the influence on beam parameters in RHIC and beam size in transport line due to change of AGS beam parameters.	Xu J
90	AD/RHIC-71	Longitudinal stochastic cooling in RHIC.	Wei J, Ruggiero AG
90	AD/RHIC-72	Betatron distortion due to linear coupling and its effects on the dynamic aperture in RHIC.	Parzen G
90	AD/RHIC-73	β -functions in the presence of linear coupling.	Parzen G
90	AD/RHIC-74	A feedback device to damp the coherent oscillations from injection errors in RHIC.	Xu J, Claus J, Ruggiero AG
90	AD/RHIC-75	Using skew quadrupoles in the arc.	Lee SY, Tepikian S
90	AD/RHIC-76	A possible way to reduce the required power of the transverse damper system.	Xu J, Ruggiero AG
90	AD/RHIC/AP-87	Tolerance on $\Delta\theta$ fluctuation in the dipole.	Parzen G
90	AD/RHIC/AP-88	Effects of position errors of the magnetic center in dipoles.	Parzen G
90	AD/RHIC/AP-89	Comments on the a_1, b_1 correction system.	Parzen G

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YR	BNL ID Other ID	Full Title	Author(s)
90	AD/RHIC/AP-90	Analysis and correction of the closed orbit distortion for RHIC.	Ruggiero AG
90	AD/RHIC/AP-91	Intrabeam scattering results with constant voltage rf buckets for the 160 MHz rf system.	Parzen G
90	AD/RHIC/AP-92	Power supply accuracy requirements due to fluctuations in the tune.	Parzen G
90	AD/RHIC-80	The influence of the off center of BPM on the damper system.	Xu J, Claus J
90	AD/RHIC-81	Intrabeam scattering and the beam life-time.	Wei J, Ruggiero AG
90	AD/RHIC-82	The residual tune splitting in the presence of linear coupling.	Parzen G
91	AD/RHIC/AP-93	The residual tune splitting due to linear coupling - theory and correction.	Parzen G
91	AD/RHIC-84	Transition crossing in the RHIC.	Wei J
91	AD/RHIC-85	Long term stability in RHIC.	Parzen G
91	AD/RHIC-86	Populating 114 buckets by bunch shifting - study on Cottingham's scheme.	Wei J, Ruggiero AG
91	AD/RHIC-87	The transverse damper system for RHIC.	Xu J, Claus J, Raka, E, Ruggiero AG, Shea TJ
91	AD/RHIC-88	Perturbation treatment of the longitudinal coupling impedance of a toroidal beam tube.	Hahn H, Tepikian S
91	AD/RHIC-89	Comparison between coasting and bunched beams on optimum stochastic cooling and signal suppression.	Wei J

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YR	BNL ID Other ID	Full Title	Author(s)
91	AD/RHIC-90	Beam life-time with intrabeam scattering and stochastic cooling.	Wei J, Ruggiero AG
91	AD/RHIC-91	First turn around strategy for RHIC.	Milutinovic J, Ruggiero AG
91	AD/RHIC-92	Beta functions in the presence of linear coupling.	Parzen G
91	AD/RHIC-93	Tune splitting in the presence of linear coupling.	Parzen G
91	AD/RHIC-94	Dynamic aperture effects due to linear coupling.	Parzen G
91	AD/RHIC-95	Aperture determination by long term & multiparticle tracking.	Dell GF, Parzen G
91	AD/RHIC-96	Correction of skew-quadrupole errors in RHIC.	Dell GF, Hahn H, Lee SY Parzen G, Tepikian S
91	AD/RHIC-97	Beam-beam interaction and high order resonances.	Tepikian S, Lee SY
91	AD/RHIC-98	Analytic closed orbit analysis for RHIC insertion.	Lee SY, Tepikian S
91	AD/RHIC-100	Theory of the tune shift due to linear coupling.	Parzen G
91	AD/RHIC-101	Properties of a symmetric RHIC insertion.	Lee SY
91	AD/RHIC-102	Theory of the beta function shift due to linear coupling.	Parzen G
91	AD/RHIC-103	Modification of the U-Line of the RHIC injection line.	Xu J
91	AD/RHIC-104	How robust will the RHIC lattice be during commissioning?	Ohnuma S
91	Booster TN-192	Improvement of the Booster heavy ion injection.	Xu J

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YR	BNL ID Other ID	Full Title	Author(s)
91	AD/RHIC/AP-94	Studies of the injected line for AGS RHIC lattice.	Xu J
91	AD/RHIC/AP-95	Proposed chromaticity correction system for RHIC.	Parzen G
91	AD/AP-22	The BNL heavy-ion beam facility.	Ruggiero AG
91	AD/AP-23	Coherent signals of the bunched beam at high frequency.	Wei J
91	AD/AP-24	Beta-function distortions due to linear coupling.	Garczynski V
91	AD/AP-25	The tune shift due to linear coupling.	Garczynski V
91	AD/AP-26	RHICAGR - A most simplified RHIC lattice.	Ruggiero AG
91	AD/AP-28	Emittance change due to linear coupling - possible correction scheme of emittance growth.	Garczynski V
91	AD/AP-29	Exact analysis to any order of the linear coupling problem in the thin lens model.	Ruggiero AG
91	AD/AP-30	Beam abort in RHICAGR.	Ruggiero AG
91	AD/AP-31	Listing of accelerator physics division reports (06/87-10/91).	Manning PM

B. Accelerator Physics
Technical Notes

Accelerator Physics
Technical Notes

Note No.	Date	Author	Title
AD/AP-1	03/87	E.D. Courant	Helical Siberian Snakes
AD/AP-2	04/87	Z. Parsa	Network & Communications
AD/AP-3	04/87	Z. Parsa	Information on IBM 3090
AD/AP-4	05/87	Z. Parsa	Guide to VAX, CDC and IBM 3090
AD/AP-5	05/87	Z. Parsa	AGS-Booster and RHIC Lattices with Racetrack
AD/AP-6	06/87	Z. Parsa	Nonlinear Effects and Chromaticity Studies for the AGS Booster
AD/AP-7	06/87	J. Wei S.Y. Lee	Second Order Perturbation Calculation in Energy Exchange of FEL
AD/AP-8	10/87	Z. Parsa	Accelerator Physics Code Comparison
AD/AP-9	05/88	J. Milutinovic A.G. Ruggiero	Comparison of Accelerator Codes for a RHIC Lattice
AD/AP-10	05/88	A.G. Ruggiero	The Longitudinal Coupling Impedance of a Toroidal Vacuum Chamber in the Low Frequency Range
AD/AP-11	10/88	G. Di Massa A.G. Ruggiero	Beam Position Monitor
AD/AP-12	09/89	S.Y. Lee	Multiple Expansion for the Eddy Current Correction Coils
AD/AP-13	10/89	S.Y. Lee	On the Radius of Convergence for Multipole Expansion
AD/AP-14	11/89	J. Milutinovic A.G. Ruggiero	Analysis of Effects of Closed Orbit Errors, Quadrupole $\Delta K/K$ Random Errors and Random Quadrupole Rotation Errors for the SSC LEB
AD/AP-15	01/90	A.G. Ruggiero	Estimate of the Coupling Impedance and Individual Bunch Instabilities for the Low Energy Booster (SSC)

Note No.	Date	Author	Title
AD/AP-16	01/90	M. Rhoades-Brown J. Claus	Particle Losses in RHIC due to Intrabeam Scattering out of the Momentum Aperture
AD/AP-17	01/90	G. Parzen	Space Charge Effects in the Low Energy Booster
AD/AP-18	02/90	S. Tepikian	Resonance Correction for the SSC-LEB
AD/AP-19	02/90	J. Claus	Experimental Cooling of Bunched Beams in FNALs Accumulator Ring
Ad/AP-20	04/90	G.F. Dell	Tracking Studies on a Lattice for the SSC Low Energy Booster
AD/AP-21	07/90	E.D. Courant	Parameterization of Transport and Period Matrices with X-Y Coupling
AD/AP-22	01/91	A.G. Ruggiero	The BNL Heavy-Ion Beam Facility
AD/AP-23	03/91	J. Wei	Coherent Signals of the Bunched Beam at High Frequency
AD/AP-24	08/91	V. Garczynski	Beta-Function Distortions Due to Linear Coupling
AD/AP-25	08/91	V. Garczynski	The Tune Shift Due to Linear Coupling
AD/AP-26	08/91	A.G. Ruggiero	RHICAGR - A Most Simplified RHIC Lattice
AD/AP-27	08/91	R.L. Gluckstern S. Ohnuma	Estimate of Diffusion Rate Due to Periodic Crossing of Non-Linear Resonances
AD/AP-28	09/91	V. Garczynski	Emittance Change Due to Linear Coupling - Possible Correction Scheme of Emittance Growth
AD/AP-29	09/91	A.G. Ruggiero	Exact Analysis to any Order of the Linear Coupling Problem in the Thin Lens Model
AD/AP-30	10/91	A.G. Ruggiero	Beam Abort in RHICAGR
AD/AP-31	11/91	P.M. Manning	Listing of Accelerator Physics Division Publications (06/87-10/91)

C. Accelerator Physics
Thursday Talks

Available upon request

Accelerator Physics Division

Thursday Meetings Talks Given

Date	Talk #	Speaker	Title
06/18/87	1	S.Y. Lee	Review of RHIC Lattice
	2	T. Ludlam	More Recent Use Requirements for RHIC
06/25/87	3	P. Thieberger	Performance of Heavy Ion Beams in the Tandem and HITL
	4	H. Foelsche	Performance of Heavy Ion Beams in the AGS
07/07/87	5	W. Weng	Booster Design Update
	6	Y.Y. Lee	Accumulator/Booster
	7	G. Parzen	Space Charge Effects in the AGS Booster
07/16/87	8a	S.Y. Lee	Parasitic Heating
	8b	A.G. Ruggiero	Beam Induced Wall Heating
	9	J. Milutinovic	Comparison of Performances of Some Computer Codes on RHIC Lattice
	10	S.Y. Lee	RF Problem at Transition
07/23/87	11	G.F. Dell	1. Dynamic Aperture for Booster 2. Coupling and Eddy Current Multiples 3. Vacuum Chamber Profile for Booster
	12	A.G. Ruggiero	1. Assignments for the Booster Study 2. Tandem Considerations 3. RF Choice in the Booster
07/30/87	13	A.G. Ruggiero	Vacuum Pipe Heating in RHIC
	14	S.Y. Lee	Transition Energy Crossing in RHIC
	15	J. Milutinovic	Closed Orbit Errors in RHIC
08/06/87	16	A.G. Ruggiero	From the Tandem to the Booster
	17	J. Milutinovic	Closed Orbit Analysis for Booster
08/20/87	18	G.F. Dell	Chromaticity Effects in RHIC
	19	G. Parzen	Intrabeam Scattering with Coupling
	20	H. Hahn	Accelerator Physics Requirements for RHIC

Date	Talk #	Speaker	Title
08/27/87	21	J. Claus	Method for Changing the Harmonic Number Adiabatically
	22	A.G. Ruggiero	Heavy Ion Beam Intensity into the Booster
09/03/87	23	A.G. Ruggiero	Organization and FY88 Projected Budget
	24	G. Parzen	Effects of Random Quadrupole Field Errors and Their Correction
09/16/87	25	E. Raka	RF Capture in the Booster and AGS of Protons
	26	P. Thieberger	Plans of Tandem Improvement
09/24/87	27	J. Claus	Stochastic Cooling for RHIC
10/15/87	28	S.Y. Lee	RHIC Lattice
	29	J. Milutinovic & A.G. Ruggiero	Code Comparisons on RHIC
10/22/87	30	S.Y. Lee	Transition Energy Crossing in RHIC
10/29/87	31	A.G. Ruggiero	Individual Bunch Instability
	32	W. Weng	Booster DOE Review: The Past and the Next Reviews
11/05/87	33	A.G. Ruggiero	Closed-Orbit Studies and Survey for AGS-Booster
	34	J. Claus	Projection Progress: - Beam Abort in RHIC - Beam Injection in RHIC - Bunch Recombination for Heavy Ions
	35	G. Parzen	Tune Spreads and Splitting Due to Random Field Errors in RHIC
11/12/87	36	A.G. Ruggiero	Individual Bunch Instability in the AGS Booster
	37	S.Y. Lee	Finalization of RHIC Lattice
	38	G.F. Dell	Tracking Results for RHIC at Transition Crossing with γ_T -Jump
11/19/87	39	A.G. Ruggiero	Individual Bunch Instability in the AGS
	40	J. Wei	Simulation of Multiturn Heavy-Ion Injection at Booster
	41	S.Y. Lee	Summary of Projects under Investigation

Date	Talk #	Speaker	Title
12/03/87	42	A. Stevens	Internal Beam Abort for RHIC
	43	H. Foelsche	Internal Beam Abort for RHIC
	44	J. Milutinovic	Beam Abort Issue
12/10/87	45	M. Rhoades-Brown	Heavy Ion Injection for RHIC
	46	Z. Parsa	(Not turned in)
	47	A.G. Ruggiero	Vacuum Chamber Resonances Due to Curvature
12/17/87	48	A.G. Ruggiero	Coupled-Bunch Longitudinal Instability
	49	G. Parzen	Space Charge Effects in the Fermilab Booster and the AGS Booster
	50	E. Raka	Longitudinal Coupled Bunch Instability
01/07/88	51	G.F. Dell	Importance of Eddy Current Multipoles and Distribution of Sextupoles for Chromaticity Correction
	52	G.F. Dell	Booster Survey Issues
01/14/88	53	A.G. Ruggiero & J. Milutinovic	Closed Orbit Analysis for the Booster
	54	S. Tepikian	Intra-Beam Scattering in the Presence of Multipoles
	55	Z. Parsa	Closed Orbit Correction Studies for the AGS Booster
01/21/88	56	J. Claus	A.G. Focussing in Longitudinal Phase Space
	57	S.Y. Lee	Transition Energy Crossing in RHIC
	58	P.A. Thompson	Diode Limits on Ramp Rate
01/28/88	59	G. Parzen	Space Charge Effects in the AGS Booster
	60	A.G. Ruggiero	Longitudinal Space Charge in a Toroidal Vacuum Chamber
02/04/88	61	A.G. Ruggiero	Longitudinal Space Charge in a Toroidal Vacuum Chamber - Part II
	62	H. Foelsche	RHIC: Internal Beam Abort
02/11/88	63	J. Claus	RHIC Injection
02/18/88	64	E. Raka	Measurements of Z/n

Date	Talk #	Speaker	Title
02/25/88	65	A.G. Ruggiero	Complete Solution of the Longitudinal Space-Charge Coupling Impedance in a Toroidal Vacuum Chamber
	66	M. Rhoades-Brown	Accelerating Uranium in RHIC I - The Problems and the Role of an Intermediate Linac
	67	G. Parzen	Emittances and 4-Dimensional Beam Surfaces in RHIC
	68	H. Hahn	(Not turned in)
03/03/88	69	M.Rhoades-Brown & A.G. Ruggiero	An Alternative Injection Scheme for Heavy Ions into the Booster
	70	J. Wei	RF Capture on the Booster with Space Charge
03/17/88	71	E. Raka	RF-Beam Loading for RHIC
	72	A.G. Ruggiero	Wall Impedance Budget for RHIC
04/14/88	73	G. Parzen	Effects of Random Quadrupole Field Errors and their Correction
	74	G.F. Dell	Magnet Sorting - Outline
04/21/88	75	W. Weng	Booster DOE Review
	76	G. Parzen	Review of RHIC Correction System
04/28/88	77	J. Wei	More Recent RF Simulations for RHIC
	78	G.F. Dell	b ₄ Correctors
05/05/88	79	G. Parzen	Intrabeam Scattering Results for a High Frequency RF System
	80	P.A. Thompson	RHIC Correctors
05/12/88	81	A.G. Ruggiero	Discussion and Selection of the RF Parameters for RHIC
05/05/88	82	J. Milutinovic	Report of Work for the SSC
05/26/88	83	J. Wei	μ Wave Instability in RHIC
	84	M. Rhoades-Brown	Uranium Strategy for RHIC Alternative h=3 Strategy for Gold
	85	G. Parzen	Intrabeam Scattering Results for a High Frequency RF System with Right RF Buckets

Date	Talk #	Speaker	Title
06/02/88	86	A.G. Ruggiero	Betatron-Synchrotron Coupling in RHIC Considerations on Bunch Area
	87	E. Raka	
06/23/88	88	J. Wei	Bunch Recombination
	89	G. Parzen	RF Capture at Transition for RHIC Dependence of Intrabeam Scattering on the Initial Bunch Area
07/28/88	90	J. Claus & G.F. Dell	Accelerator Physics for RHIC, Snowmass, CO, July 1988
	91	S.Y. Lee	Arrangement of Low- β Insertions in RHIC
08/04/88	92	A.G. Ruggiero & E. Raka & H. Hahn	Summary of the rf Mini-Workshop
08/11/88	93	G. Parzen	The Effect of Resonances on the Space Charge Limit
08/25/88	94	G.F. Dell	Magnet Shuffling for RHIC
09/01/88	95	M. Rhoades-Brown	h=1 vs h=3 Booster Scenario for RHIC Ion Dissociation Effects in RHIC
	96	S. Tepikian	
09/26/88	97	G. Di Massa	Beam Position Monitor Analysis
10/13/88	98	A.G. Ruggiero & J. Milutinovic	Closed Orbit Analysis for RHIC
11/03/88	99	A.G. Ruggiero	General Communications
	100	A.G. Ruggiero	Beam Separation in RHIC
	101	E.D. Courant	Closed Orbit Analysis for RHIC
	102	G. Parzen	Intrabeam Scattering with Stochastic Cooling
11/17/88	103	A.G. Ruggiero	a ₁ -Errors, Correctors and Shuffling Linear Random Quadrupole Effects and Their Correction
	104	G. Parzen	
12/01/88	105	G.F. Dell	Magnet Sorting in RHIC on a ₁ and b ₁ ν -Splitting Due to Random Skew Quadrupole Fields
	106	G. Parzen	
12/08/88	107	A.G. Ruggiero	a ₁ -Errors, Correctors and Shuffling Booster Accelerator Physics
	108	W. Weng	

Date	Talk #	Speaker	Title
12/15/88	109	J. Milutinovic	Sextupoles & Closed Orbit Corrections
	110	A.G. Ruggiero	More on a_1 and b_1 ...
	111	G.F. Dell	Magnet Sorting (cont.)
12/22/88	112	G. Parzen	Effect of Sextupole Fields on the Dynamic Aperture
	113	S.Y. Lee	Review of the Sextupole Requirements for RHIC
01/12/89	114	A.G. Ruggiero	Octupole, Decapole Errors and Correctors
	115	G. Parzen	ν Spreads Due to Systematic Field Errors including b_3 , b_4 and a_1
01/19/89	116	G.F. Dell	b_3 and b_4 Effects
	117	G.F. Dell	Magnet Sorting
02/09/89	118	G. Parzen	Dynamic Aperture and the Role of BC2
	119	G. Parzen	Dynamic Aperture for Lattices with Some $\beta^*=2$ Insertions
	120	G.F. Dell	Dynamic and Physical Aperture vs Coil I.D. of BC2
02/23/89	121	J. Claus	Measurement of Lattice Functions in RHIC
04/06/89	122	P. Wanderer	RHIC Magnet Measurements
04/13/89	123	A.G. Ruggiero	Random a_1, b_1 Errors, Correctors and Shuffling
	124	J. Herrera	Random Errors in the Magnetic Field Coefficients of Superconducting Magnets
04/18/89	125	G. Parzen	Loss of Dynamic Aperture Due to Random Quadrupole Errors
	126	G. Parzen	The Residual ν -Shift Due to Random Skew Quadrupole Errors
06/08/89	127	A.G. Ruggiero	What's Next
06/29/89	128	G.F. Dell	Tune Shifts from Systematic Multipoles
	129	G. Parzen	Systematic Multipoles in the Dipoles and Their Effect on Dynamic Aperture and ν -Spread

Date	Talk #	Speaker	Title
07/13/89	130	G.F. Dell	Tolerances on Systematic Multipoles in RHIC Quads
	131	G. Parzen	Systematic Multipoles in the Quadrupoles and Their Effect on Dynamic Aperture and ν -Spread
	132	G. Parzen	ν -Spread Due to Random Field Multipoles
09/14/89	133	J. Claus	Stochastic Cooling of Bunched Beams in FNAL's Accumulator
	134	S.Y. Lee	Multipole Expansion of Eddy Current Correction Coils
09/20/89	135	E. Willen	Summary of Magnet BMD003
09/27/89	136	A.G. Ruggiero	Booster Magnet Tolerances
	137	G. Parzen	Dynamic Aperture Due to the Eddy Current Correction Coil in the Booster
	138	G.F. Dell	Multipole Tolerances for the AGS-Booster
	139	S.Y. Lee	6D Simulation for Proton Injection in AGS Booster
10/26/89	140	G. Parzen	Dependence of the Space Charge Limit on the Choice of ν -Values
11/09/89	141	A.G. Ruggiero	Longitudinal μ -Wave Instability for RHIC, Proton Beams
11/16/89	142	A.G. Ruggiero	Microwave Instabilities in RHIC Part II: Au79
	143	J. Wei	Longitudinal Instabilities for a Bunched Beam
	144	S. Tepikian	Calculating the Impedance of the Synchrotron Valves using MAFIA
12/07/89	145	G. Parzen	ν -Spread Due to Random Field Errors
12/14/89	146	G.F. Dell	Studies on Nonzero Sums of Random Multipoles in RHIC
	147	D. Neuffer(LANL)	Nonlinear Correction in Large Colliders - SSC, LHC and RHIC
12/21/89	148	A.G. Ruggiero	Dipole Field Twist in RHIC
	149	G.F. Dell	Dipole Studies

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12/28/89	150	G. Parzen	Tolerance on $\Delta\theta$ Fluctuation in the Dipole
	151	G. Parzen	Tolerance on the Random Sagitta Error in Dipoles
01/04/90	152	A.G. Ruggiero	Correction Scheme of Systematic Decapole in RHIC Dipoles
	153	G. Parzen	ν -Spread Due to b_2, b_3, b_4 in Dipoles. Status Report
01/11/90	154	A.G. Ruggiero	Resonances Due to Octupoles Errors for RHIC
	155	G.F. Dell	Dipole Studies
	156	M. Rhoades-Brown	Analytic Study of Decapole Corrector Schemes
1/18&25/90	157	A.G. Ruggiero	Review of the Error Analysis for RHIC
03/08/90	158	G.F. Dell	LBL Workshop Summary
	159	A.G. Ruggiero	Alternative a_1, b_1 Correctors Scheme
	160	S.Y. Lee	$a_1 b_1$ Correction in RHIC
03/15/90	161	G. Parzen	Comments on the a_1, b_1 Correction System
03/22/90	162	S. Tepikian	Closed Orbit Analysis of the RHIC Insertion
	163	G. Parzen	Betatron Distortion Due to Linear Coupling
04/12/90	164	G.F. Dell	Effects Produced by a_1 Multipoles
	165	H. Hahn & S. Tepikian	On the Low Frequency Coupling Impedance of a Toroidal Beam Tube
05/03/90	166	J. Wei	Stochastic Cooling Experiment in FNAL Accumulator Ring
	167	T. Shea	Stochastic Cooling Experiments at Fermilab
	168	A.G. Ruggiero	SSC Long-Term Tracking
07/12/90	169	A.G. Ruggiero	Present Status of SSC
	170	S.Y. Lee	F3IW Workshop - Fermilab
07/19/90	171	S.Y. Lee	RHIC High- β Insertions
	172	J. Wei	Intrabeam Scattering and the Lifetime

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07/25/90	173	G. Parzen	Intrabeam Scattering Results with Constant Voltage RF Buckets for the 160 MHz RF System
	174	J.M. Wang	Longitudinal Coherent Instabilities
08/02/90	175	J. Xu	Beam Transfer from AGS to RHIC and Beam Injection into RHIC
08/22/90	176	S. Ohnuma	Operation of Tevatron Near an Integer Tune and Linear Coupling in RHIC
09/13/90	177	A.G. Ruggiero	Bunch-to-Bunch Longitudinal Instabilities
09/20/90	178	J. Milutinovic	First Turn Strategy for RHIC
	179	E. Raka	Longitudinal Coupled Bunch Instability
10/04/90	180	G. Parzen	Power Supply Accuracy Requirements
10/11/90	181	G.F. Dell	Long Range Tracking
	182	A.G. Ruggiero	Theoretical Predictions and Long Range Tracking
10/18/90	183	G. Parzen	Long Range Stability Studies
10/25/90	184	G. Parzen	Beam-Beam Resonances at Zero Crossing Angle
	185	S. Tepikian	Beam-Beam Interaction and High Order Resonances
11/01/90	186	J. Wei	Beam Lifetime and Stochastic Cooling
	187	A.G. Ruggiero	Cooling Techniques
11/08/90	188	J. Wei	Betatron Cooling for a Bunched Beam
11/15/90	189	S. Tepikian	A Toroidal Vacuum Chamber
	190	H. Hahn	Toroidal Z/n
12/06/90	191	J. Wei	Stochastic Cooling for RHIC
01/24/91	192	A.G. Ruggiero	Acceleration and Crossing Transition Energy in RHIC
01/31/91	193	G. Parzen	Implications of Long Term Stability for RHIC

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02/07/91	194	J. Wei	Review of Transition Crossing in RHIC
03/28&04/4/91	195	V. Garczynski	The Linear X-Y Coupling: A Fresh Look
04/11/91	196	S. Tepikian	Second Order Perturbation Theory of Skew Quadrupoles
05/16/91	197	J. Wei	Report on Fermilab Trip
	198	A.G. Ruggiero	The Problem of Linear Coupling - Part I
05/23/91	199	A.G. Ruggiero	The Problem of Linear Coupling - Part II
05/30/91	200	A.G. Ruggiero	The Problem of Linear Coupling - Part III
06/06/91	201	G. Parzen	The Residual Tune Splitting Due to Linear Coupling - Theory and Correction
08/15/91	202	V.G. Vaccaro	Passive Compensation of Space Charge at the Transition Energy Crossing in RHIC
08/19/91	203	V.G. Vaccaro	The Coupling Impedance of an Infinite Array of Diaphragms - A Novel Approach