Appendix A

Acronyms and Abbreviations

A.1 Physics and Simulations

Table A.1: Acronyms and Abbreviations for Physics and Simulations

Item	Description
FRITIOF	a Swedish Monte Carlo event generator (a Norse god)
GEANT	standard CERN simulation program (French for "giant")
HBT	Hanbury-Brown–Twiss (Bose-Einstein correlation)
HIJET	Heavy Ion simulation program (derived from ISAJET)
ID	Identification
PID	Particle Identification
PISA	Phenix Integrated Simulation Application
PISORP	PISA Output Readback Program
QCD	Quantum Chromodynamics
QGP	Quark-Gluon Plasma
E_T	transverse energy
p_T	transverse momentum
p_{total}	total momentum
r	radial dimension from beam axis
T_C	critical temperature (for the transition)
y	rapidity
z	dimension along beam axis
$\Delta\Omega$	solid angle
η	pseudorapidity
ϕ	azimuthal angle
θ	polar angle

A.2 Detectors and Hardware

Table A.2: Acronyms and Abbreviations for Detectors and Hardware

Item	Description
AB	Analog Buffer
ADC	Analog to Digital Converter
AMU	Analog Memory Unit
AP	Analog Processing
ASIC	Application Specific Integrated Circuit
B	Buffer
BB	Beam-Beam Counter (Inner Detectors System)
BC	Beam Clock
CM	Central Magnet
CFD	Constant Fraction Discriminator
CMOS	Complimentary Metal Oxide Semiconductor
COB	Chip On Board
CTR1	em Fictitious Central-Arm Tracker
DAI	Data Acquisition Interface
DAQ	Data Acquisition System
DC	Drift Chamber (Tracking System)
DX	Name of a RHIC magnet closest to the collision point
DCM	Data Collection Module
DMU	Digital Memory Unit
DSP	Digital Signal Processor
EB	Event Builder
EMCal	Electromagnetic Calorimeter System
ENC	Equivalent Noise Charge
FADC	Flash Analog-to-Digital Converter
FEE	Front-End Electronics
FEU*nnn*	Russian PMT #*nnn*
FIFO	First In First Out
FOL	Fiber Optic Link
FOXFET	Field Oxide Field Effect Transistor
FPGA	Field-Programmable Gate Array

Table A.2: Acronyms and Abbreviations for Detectors and Hardware (Continued)

Item	Description
GARFIELD	Drift-chamber simulation program
GLn	Global Level-n (trigger)
G-10	Fiber-glass-resin composite insulating board
heap	ASK GLENN
HBD	Hadron-Blind Detector
HDI	High Density Interconnects
HRX	High Resolution Crystal
HV	High Voltage
HVAC	Heating, ventilation and air conditioning
IC	Integrated Circuit
LLn	Local Level-n (trigger)
LSB	Least Significant Bit
LTS	Local Trigger Supervisor
LVL-n	Level-n for trigger
MB	Mega Bytes
MCM	Multichip Module
MCS	Monitor and Calibration Supervisor
MIMD	Multiple Instruction, Multiple Data
MM	Muon Magnet
MSB	Most Significant Bit
MVD	Multiplicity Vertex Detector (Inner Detectors System)
MUX	Multiplexer
μID	Muon Identification (Muon Arm)
μP	Microprocessor
μT	Muon Tracking (Muon Arm)

Table A.2: Acronyms and Abbreviations for Detectors and Hardware (Continued)

Item	Description
NIM	Nuclear Instrument Module
PbGl	Lead-Glass (EMCal System)
PbSc	Lead-Scintillator (EMCal System)
PCn	Pad Chamber $\#n$ (n = 1,2,3) (Tracking System)
PGA	Programmable Gate Array
PLA	Programmable Logic Array
PMT	Photomultiplier Tube
PPAC	Parallel Plate Avalanche Counter
PPMD	Programmable Prescalable Multilevel Discriminator
POPOP	organic compound (scintillator and wavelength shifter)
QVC	Charge-to-Voltage Converter
RICH	Ring Imaging Cherenkov Detector
RISC	Reduced Instruction Set Computer
ROC	Readout Controllerss
TAC	Time-to-Amplitude Converter
TDC	Time-to-Digital Converter
TEC	Time Expansion Chamber (Tracking System)
TOF	Time-of-Flight System
TR	Transition Radiation
TRD	Transition Radiation Detector
TVC	Time-to-Voltage Converter
TTS	Transit Time Spread
UV	Ultra-Violet
VME	Versabus Module for Eurocard
VWVR	Voltage Write and Voltage Read
WLS	WaveLength Shifting
68K	Motorola 68nnn Series Microprocessor

A.3 Organizations and Facilities

Table A.3: Acronyms and Abbreviations for Organizations and Facilities

Item	Description
AGS	Alternating Gradient Synchrotron
BARC	Bhabha Atomic Research Center, India
BNL	Brookhaven National Laboratory
CDF	Collider Detector Facility (an experiment at FNAL)
CERN	Centre European pour la Recherche Nucleaire (Switzerland)
CIAE	China Institute of Atomic Energy
DESY	Deutches Electronen Synchrotron (Hamburg, Germany)
DOE	Department of Energy
ESB	Experimental Support Building
E*nnn*	Experiment #*nnn* at the AGS. Also, Experiment #*nnn* at FNAL.
FNAL	Fermi National Accelerator Laboratory
GAMS	a Russian lead-glass array at CERN
GEM	Gammas, Electrons, Muons (SSC experiment)
GSI	Gesselschaft für Schwerionen Forschung (Darmstadt, Germany)
IEEE	Institute of Electrical and Electronic Engineers
IHEP-Beijing	Institute of High Energy Physics, Beijing, China
IHEP-Protvino	Institute of High Energy Physics, Protvino, Russia
IMP-Landzou	Institute of Modern Physics, Landzou, China
INR-Moscow	Institute for Nuclear Research, Moscow, Russia
INS	Institute for Nuclear Study, University of Tokyo, Japan
ISR	Intersecting Storage Ring (at CERN)
ITEP-Moscow	Institute of Theoretical and Experimental Physics, Moscow, Russia
Idaho NEL	Idaho National Engineering Laboratory
JACEE	Japanese-American Collaborative Emulsion Experiment
JINR	Joint Institute for Nuclear Study, Russia
KEK	Institute for High Energy Physics (Koh Energy Ken), Japan
KEK-PS	Proton Synchrotron at KEK
LANL	Los Alamos National Laboratory
LEP	Large Electron-Positron collider at CERN
LBL	Lawrence Berkeley Laboratory
LLNL	Lawrence Livermore National Laboratory

Table A.3: Acronyms and Abbreviations for Organizations and Facilities (Continued)

Item	Description
MFH	Major Facility Hall
MIT	Massachusetts Institute of Technology
NAnn	North-area experiment #nn at CERN
ORNL	Oak Ridge National Laboratory
PHENIX	Pioneering High Energy Nuclear Ion eXperiment
PHENIX–J	PHENIX–Japan
PNPI	St. Petersburg Nuclear Physics Institute, Russia
RHIC	Relativistic Heavy Ion Collider
SDC	Solenoidal Detector Collaboration at SSC
SUNY	State University of New York
SSC	Superconducting Super Collider
SSCL	Superconducting Super Collider Laboratory
UAn	Underground-area experiment #n at Sp$\bar{\text{p}}$S at CERN
UC	University of California
US	United States
WAnn	West-area experiment #nn at CERN
ZEUS	detector (named for a Greek god) at HERA e–p collider at DESY

A.4 Management and Miscellaneous

Table A.4: Acronyms and Abbreviations for Management and Miscellaneous

Item	Description
CDR	Conceptual Design Report
DC	Detector Council
EC	Executive Council
EDIA	Engineering, Design, Inspection, Administration
ES&H	Environment, Safety and Health
MOU	Memorandum of Understanding
PAC	Program Advisory Committee
PM	Project Management
PO	Project Office
R&D	Research and Development
SE	Systems Engineering Group at BNL for PHENIX
SEAPPM	Safety and Environmental Administrative Policy and Procedure Manual
TAC	Technical Advisory Committee
TBA	To be Assigned
WBS	Work Breakdown Structure
pCDR	Preliminary Conceptual Design Report

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