

# Actions Following Brookhaven National Laboratory High Energy and Nuclear Physics Program Advisory Committee Meetings 1996–Present

## 26-27 August 2002

P959R (T. Kishimoto): Study of Kaonic Nuclei by the ( $K^-$ ,  $N$ ) Reactions. *Rejected*.

P961R (R. Chrien, T. Fukuda, A. Rusek): Search for Double- $\Lambda$  Hypernuclei by Sequential Pionic Decays. *Provisional scientific approval*.

P965 (K. McDonald): Proposal to Measure the Efficiency of Electron Charge Sign Determination up to 10 GeV in a Magnetized Liquid Argon Detector ( $\mu$ LANNDD). *Deferred*.

## 28-29 September 2001

P959 (T. Kishimoto): Study of Kaonic Nuclei by the ( $K^-$ ,  $N$ ) Reactions. *Rejected*.

P961 (R. Chrien, T. Fukuda, A. Rusek): Search for Double- $\Lambda$  Hypernuclei by Sequential Pionic Decays. *Rejected*.

P962 (V. Hughes, B.L. Roberts): A Precision Measurement of the Muon ( $g-2$ ) Value. *Scientific Approval*

P964 (K. Imai, K. Nakazawa, H. Tamura): Systematic Study of Double Strangeness System by an Emulsion-Counter Hybrid Method. *Scientific Approval*.

BRAHMS, PHENIX, Phobos, and STAR presented their Beam Use Proposals to the PAC. The following priorities were established for additional running, should it be possible, following the FY02 polarized proton run:

1. Complete the Run 2 objectives in all four experiments with Au+Au at 200 A·GeV;
2. A short machine development run to extend the RHIC capability to deliver d+Au;
3. If substantial running time (with comparable event sample to Au+Au) becomes available before the 2002 shutdown, a dedicated d+Au run with the current detectors should be performed; if only a few weeks become available, short runs with different nuclear species and/or energies should be undertaken.

### 30 November–1 December 2000

P958 (J. Comfort, M. Sadler): Pion Charge Exchange Cross Sections at Low Energies. *Scientific Approval.*

R15 (Y. Onel, S. White): Scattering Protons and Ions at RHIC on Internal Targets (SPIRIT). *Rejected.*

R16 (J. Harris): STAR Barrel Electromagnetic Calorimeter Spin and High  $P_T$  Proposal. *Deferred, pending technical review.*

BRAHMS, PHENIX, Phobos, and STAR presented their Beam Use Proposals to the PAC. The following priorities were established:

1. The RHIC operating periods for FY01 and FY02 are combined into one continuous cryogenic operating period commencing cooldown on May 1, 2001 and anticipating first collisions about May 21 2001;
2. The sequence of RHIC colliding beams will be:  $\sim 12$  weeks of Au+Au at the highest energy (nominally 200 A·GeV), and  $\sim 5$  weeks of polarized protons at the nominal 100 GeV tune, followed by additional runs to explore the energy and ion size dependence.

### 23-25 March 2000

E906 extension (R. Chrien, T. Fukuda, A. Rusek): A search for Double- $\Lambda$  Hypernuclei by Observing Sequential Pionic Weak Decays. *Deferred.*

E927 update (J. Comfort, B. Nefkens, B. Tippens): Measurement of the  $K_{e3}^+$  Decay Rate and Spectrum. *Test run approved.*

P952 (P. Cushman): An Improved Limit on the Muon Neutrino Mass from Pion Decay in Flight. *Scientific Approval.*

P953 (M. Manley, B. Nefkens, H. Spinka): Neutral Hyperon Spectroscopy with the Crystal Ball. *Conditional approval.*

P954 (B. Nefkens, R. Peterson, A. Starostin):  $2\pi^0$  Production on Complex Nuclei by  $\pi^-$ . *Rejected.*

R8 revised (A. Krisch): Spin@RHIC. *Rejected.*

R14 (A. Melissinos): Search for the  $\theta$ -Vacuum in Relativistic Heavy Ion Collisions. *Rejected.*

### 24-25 May 1999

P951 (K. McDonald): An R&D Program for Targetry and Capture at a Muon-Collider Source. *Recommended for consideration by the Muon Collider Oversight Group (MCOG), which subsequently recommended approval. Approved as E951 on 1 October 1999.*

### 8-9 October 1998

E923 (R. Adair, M. Diwan, H. Ma): Search for T-Violating Muon Polarization in  $K_{\mu 3}^+$  Decay. *Scientific approval continued.*

E936 (J. Imazato): Search for T-Violation in the Decay  $K^+ \rightarrow \pi^0 \mu^+ \nu$  Decay Using Stopped Kaons. *Scientific approval withdrawn.*

- E948 (E. Stephenson): Investigation of Charge Exchange Scattering for RHIC Polarimetry. *Approved.*
- P949 (D. Bryman, S. Kettell, S. Sugimoto): An Experiment to Measure the Branching Ratio  $B(K^+ \rightarrow \pi^+ \nu \bar{\nu})$ . *Approved.*
- P950 (D. Fields): A Proposal to Measure the Analyzing Power for Proton-Carbon Elastic Scattering in the Coulomb-Nuclear Interference Region at the RHIC Transfer Energy. *Approved.*
- R10 (J. Sandweiss): Measurement of Bremsstrahlung and Charge Stopping in Central RHIC Collisions. *Rejected.*
- R11 (J. Harris): Endcap Electromagnetic Calorimeter for Spin Physics at STAR. *Approved.*
- R12 (J. Harris): Silicon Strip Detector for STAR. *Approved.*

### 23-24 October 1997

- P931 update (J. Gerald, E. Hungerford, V. Zeps): A Study of the  $\Delta I = 1/2$  Rule in the Weak Decay of S-Shell Hypernuclei. *Approved.*
- P940 (W. Molzon): Muon-Electron Conversion (MECO). *Scientific Approval.*
- P941 (H. Huang, R. Majka): Study of Charged and Neutral Leading Particles in p+A Collisions in the BNL AGS. *Approved.*
- P942 (R. Peterson, H. Staudenmaier): Nuclear Physics with the Crystal Ball. *Rejected*

### 28 February–1 March 1997

- E900 extension (K. Kwiatkowski, V. Viola): Heating Nuclei with Antiprotons. *Approved.*
- P936 (J. Imazato): Search for T-Violation in the  $K^+ \rightarrow \pi^0 \mu^+ \nu$  Decay Using Stopped Kaons. *Scientific Approval.*

### 30 September–2 October 1996

- P923 (R. Adair, M. Diwan, H. Ma): Search for T-Violating Muon Polarization in  $K_{\mu 3}^+$ . *Scientific Approval.*
- P924 (D. Hertzog): Study of the  $\xi(2220)$  in  $\bar{p}p \rightarrow$  Neutral Final States Using the Crystal Ball in the AGS D6 Line. *Scientific Approval.*
- P925 (Y. Makdisi, A. Yokosawa): Asymmetries in Inclusive Pion Spectra at Large  $X_F$  (0.5 to 0.8) and  $P_t \geq 0.8$  GeV/c. *Approved.*
- P926 (L. Littenberg): Measurement of  $K_L \rightarrow \pi^0 \nu \bar{\nu}$ . *Scientific Approval.*
- P927 (T. Kycia, B. Nefkens): Measurement of the  $K_{e 3}^+$  Decay Rate and Spectrum. *Deferred.*
- P928 (M. Ieri, K. Imai):  $\Xi^- p$  Scattering Experiment. *Rejected.*
- P929 (T. Kishimoto): Spin-Orbit Splitting of Single  $\Lambda$  State Studied by the  $^{13}\text{C}(K^-, \pi^- \gamma)$  Reaction. *Approved.*
- P930 (H. Tamura): High-Resolution  $\gamma$  Spectroscopy of Hypernuclei Using Large Acceptance Germanium Detector. *Approved.*
- P931 (J. Gerald, E. Hungerford, V. Zeps): A Study of the  $\Delta I = 1/2$  Rule in the Weak Decay of S-Shell Hypernuclei. *Deferred.*