MEMORANDUM OF UNDERSTANDING BETWEEN

SOUTHEASTERN UNIVERSITIES RESEARCH ASSOCIATION/THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY

AND THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN FOR

NUCLEAR PHYSICS RESEARCH ON THE GO EXPERIMENT

I. PREAMBLE

This Memorandum of Understanding (MOU) is between:

 the Thomas Jefferson National Accelerator Facility (Jefferson Lab), operated by Southeastern Universities Research Association (SURA), located at 12000 Jefferson Avenue, Newport News, VA 23606 USA, represented by Dr. L. Cardman, Associate Director of Physics Division of Jefferson Lab

and the following University:

• the University of Illinois at Urbana-Champaign (UIUC), represented by Prof. D. Beck of the Department of Physics.

The two institutions: Jefferson Lab and UIUC are hereafter referred to as the "Participants".

This MOU outlines the areas of collaboration between Jefferson Lab and UIUC regarding the loan, installation, and commissioning of the G0 Superconducting Magnet System, and defines general responsibilities of the Participants on technical, organizational, and financial matters.

II. DOMAINS OF COLLABORATIVE ACTIVITIES

Jefferson Lab and UIUC are members of the G0 collaboration (approximately 100 scientists from Armenia, Canada, France, and the US), formed to carry out the approved Jefferson Lab Hall C experiments, E99-016, E01-115 and E01-116. The G0 construction project is divided into six hardware and software subsystems (see the G0 Management Plan), one of which is the superconducting magnet system (SMS). This subsystem is the responsibility of UIUC. An earlier MOU between UIUC, Jefferson Lab, and the National Science Foundation dated September 20, 2001 describes the plan for completion of the commissioning of the SMS.

II.1 As part of the initial Hall C project, some basic experimental equipment has already been installed in Hall C that can be used for the G0 project. UIUC will continue to contribute to the completion and commissioning of G0 equipment through the participation of experimental physicists, technicians, and hired consultants. The primary equipment activity of UIUC will be the superconducting magnet system.

III. OBLIGATIONS OF THE COLLABORATING INSTITUTIONS

- III.1 Jefferson Lab's obligations as host laboratory
 - III.1.1 Jefferson Lab will provide the technical and scientific staff support necessary to integrate the equipment delivered by UIUC into the general Hall C experimental facility.
 - III.1.2 Jefferson Lab will provide technical and scientific staff support, according to the ability of its staff, for installing and commissioning the G0 magnet.
 - III.1.3 Jefferson Lab will provide administrative support to UIUC physicists, engineers, and technicians involved in collaboration activities, during their stay at Jefferson Lab in a manner consistent with the support provided to all lab users. This support includes access to Jefferson Lab computer accounts, telecommunications, stockroom, office space and materials, and secretarial help.
 - III.1.4 During the magnet installation, Jefferson Lab staff will follow all Jefferson Lab Hall C Conduct of Operations guidelines for major installations.

III.2 University of Illinois' obligations

- III.2.1 UIUC will deliver, install, and put into operation in Jefferson Lab 's Hall C the Superconducting Magnet System for the G0 experiment including, but not limited to, the magnet, magnet stand, power supply and control system.
- III.1.2 UIUC will complete the testing and commissioning activities required to bring the magnet system into full operation.
- III.1.3 During the magnet installation, UIUC staff and its consultants will follow all Jefferson Lab Hall C Conduct of Operations guidelines for major installations.
- III.3 The parties agree that the contact persons for the application of this MOU will be Dr. L. Cardman for Jefferson Lab and Prof. D. Beck for UIUC.
- III.4 Each party enters into this collaborative agreement on a best effort basis.

III.5 This MOU is subject to the availability of funding under terms imposed by the funding agencies of the respective parties.

IV. ENVIRONMENT SAFETY AND HEALTH

Each Participant shall comply with all of the host Participant regulations and requirements related to Environment Safety and Health when working at the facilities of the host Participant.

V. SPECIAL CONSIDERATIONS

UIUC will "mark" and register on an inventory list any apparatus or equipment it supplies or fabricates using UIUC funds. Such equipment will remain the property of UIUC as specified herein or in a separate agreement. Any marked apparatus or equipment installed by UIUC as part of the general Jefferson Lab experiment equipment for the G0 experiment will remain a part of the general Jefferson Lab experimental equipment until it is finally decommissioned or replaced.

VI. MODIFICATION AND APPROVAL

Except as otherwise provided herein, no agreement or understanding to vary the terms of this MOU shall be valid or binding on either Participant unless evidenced in writing and signed by the duly authorized officers or representatives of each Participant.

VII. LIABILITY FOR ACCIDENT

SURA/Jefferson Lab will hold UIUC and its employees and agents harmless from all liabilities arising out of this collaboration. UIUC will hold SURA/Jefferson Lab and its employees and agents harmless from all liabilities arising out of this collaboration.

Each party remains liable to third parties, in accordance with State and Federal law.

Neither party shall have any liability to the other for any consequential, indirect, or incidental damages from any cause whatsoever.

As soon as practical, each party agrees to inform the other of any incident involving the other party's staff members or damage occurring to the other party's property while assigned to this collaboration.

VIII. SETTLEMENT OF DISPUTES AND APPLICABLE LAW

Any dispute arising out of the performance of this MOU will be settled amicable if possible. All disputes that cannot be settled amicable between the Parties will be settled in a court of competent jurisdiction.

If SURA/Jefferson Lab is the demanding party, the Laws of the State of Illinois will be applicable and Urbana-Champaign, Illinois will be the place of adjudication. If UIUC is the demanding party, the Laws of the Commonwealth of Virginia will be applicable and Newport News, Virginia will be the place of adjudication.

Christoph Leeman Director of the Laboratory Jefferson Lab	
Lawrence Cardman Assoc. Director, Physics Jefferson Lab	Rolf Ent Hall C Leader Jefferson Lab
Allison Lung G0 Project Manager Jefferson Lab	Douglas H. Beck G0 Spokesperson UIUC

5th draft 4/8/02