

# LAWRENCE BERKELEY LABORATORY

## Proposal for Bevalac Nuclear Science Experiment

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Twenty (20) copies required - a separate set for each experiment, sent to the Accelerator Research  
Coordination Office, Building 51, Room 208, Lawrence Berkeley Laboratory, Berkeley, CA 94720

(ARC Office Use Only) (Date Received)	Date: April 18, 1986	<b>Experimenters - complete list (name, institution, title or position, address, and telephone number):</b>  LBL: J. Harris L. Teitelbaum M. Tincknell G. Odyniec H. Pugh L. Schroeder UF: R. Renfordt R. Stock GSI: T. Humanic A. Sandoval UNAM: A. Dacal M. Ortiz T.A&M J. Sullivan K. Wolf
	Group: Streamer Chamber	
	Institution: LBL, Frankfurt, GSI, UNAM Mexico, Texas A&M	
	Spokesperson (name, institution, address, telephone number):  John Harris LBL (415) 486-7127	

(ARC Office Use Only) (Disposition)	PME REQUEST SUMMARY		Beam line: 26
	<u>Particle</u>	<u>Energy</u>	<u>Hours requested</u> (Data-taking & tuneup)
	Nb	1.1 GeV/n	64
	Au	1.1 GeV/n	64

**Title of Experiment (60 characters or fewer):**

Study of Pion Production in Nb + Nb and Au + Au in the Streamer Chamber

**Summary of Experiment (for circulation; do not exceed space provided)**

This experiment will study the production of negative pions in the streamer chamber from collisions of 1.1 GeV/n Nb + Nb and Au + Au. Negative pion spectra, multiplicities and two-pion correlations will be measured. In addition, correlations between these observables and the flow plane determined from the positively-charged particles will be investigated. The streamer chamber imaging system will consist of three two-stage image-intensifier, high resolution (1024 x 1024) CCD cameras coupled to an image processing and recording system and two-stage image-intensified conventional film cameras. All Data will be analyzed digitally.

**The remaining pages of the proposal should provide additional information in the order listed on the reverse side of this page.**

**Date revised: February, 1985**