

A TOP LOADING 2 KELVIN TEST CRYOSTAT FOR SRF CAVITIES M. Kedzie, M.P. Kelly, S.M. Gerbick, J.D. Fuerst. K.W Shepard Argonne National Laboratory Argonne, IL 60439 USA

b=0.62 TRIPLE SPOKE RESONATOR (TSR)



b=1.0 ILC 9-CELL HORIZONTAL INSTALLATION



ABSTRACT

A new large 2 Kelvin test cryostat is being commissioned at Argonne National Laboratory. This system will have a full time connection to the 4.5 Kelvin Atlas refrigerator and, with a integrated J-T heat exchanger, willow allow continuous 2 Kelvin operation. The large diameter was chosen to accommodate essentially all of today's superconducting cavities and the top loading design facilitates clean room assembly. The commissioning run will be with a coaxial half wave cavity to be followed by testing with a 1.3 GHz single-cell elliptical cavity.

SRF TEST CRYOSTAT
Handles all types of SRF cavities.
Allows rapid clean assembly.
Continuous 2K operation attached to ATLAS refrigerator.



Top lid vacuum vessel

LN2 Phase

Separator

Magnetic Shielding

LN2 copper shield

ASME code stamped 400 liter liquid helium Dewar



ANL Physics Division

JTHX POD