



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Fisher

DATE: 01/30/2024

FROM: Elena Balan

Checked: SEH

: Z2095 / C008

DETAILS:

M:\align\DATA\SRFCryo\SNSPPU\CM008\FINAL\240125A

The final fiducial coordinates for the SNS cryomodule CM008 were surveyed in January 2024. The coordinate system is established as follows: the cavity string defines the beam axis, the primary Bayonet of the return can control defines the roll, and the upstream coupler defines the origin. Positive Z downstream, +X beam left, and +Y up. Consider that the measurements for the fiducials were taken using a 0.5" SMR and a Hubbs nest that has an H value of 0.5000" to the centerline of the sphere.

Name	X[inch]	Y[inch]	Z[inch]
SNSFIDA	21.422	0.025	135.792
SNSFIDB	-0.062	21.610	135.800
SNSFIDC	-21.577	0.087	135.779
SNSFIDD	21.437	0.013	97.845
SNSFIDE	-0.027	21.657	97.882
SNSFIDF	-21.553	0.182	97.838
SNSFIDG	21.451	-0.003	69.454
SNSFIDH	-0.003	21.672	69.459
SNSFIDJ	-21.515	0.171	69.444
SNSFIDK	21.452	0.037	26.861
SNSFIDL	-0.062	21.600	26.798
SNSFIDM	-21.548	0.031	26.828
SNSFIDN	21.435	-0.050	-11.149
SNSFIDP	-0.058	21.582	-11.163
SNSFIDR	-21.553	0.043	-11.185

In Vacuum Vessel			
Name	X[inch]	Y[inch]	Z[inch]
US Flange	-0.029	-0.04	-53.8415
DS Flange	-0.079	0.034	178.4735