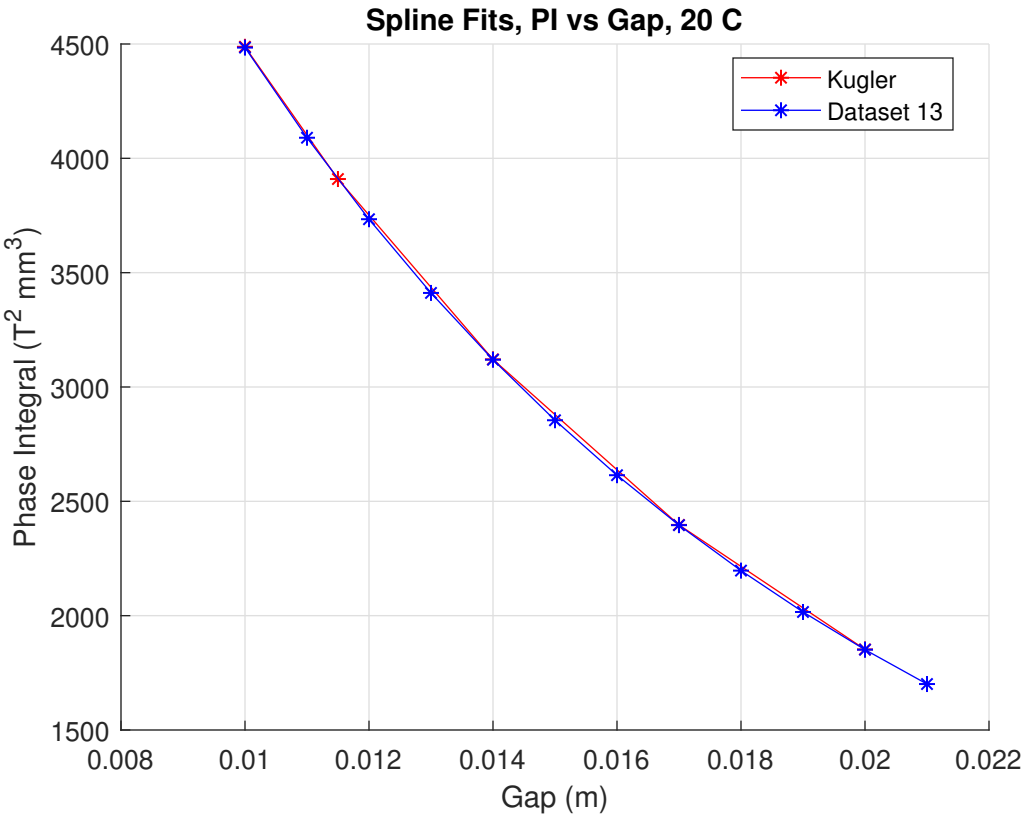
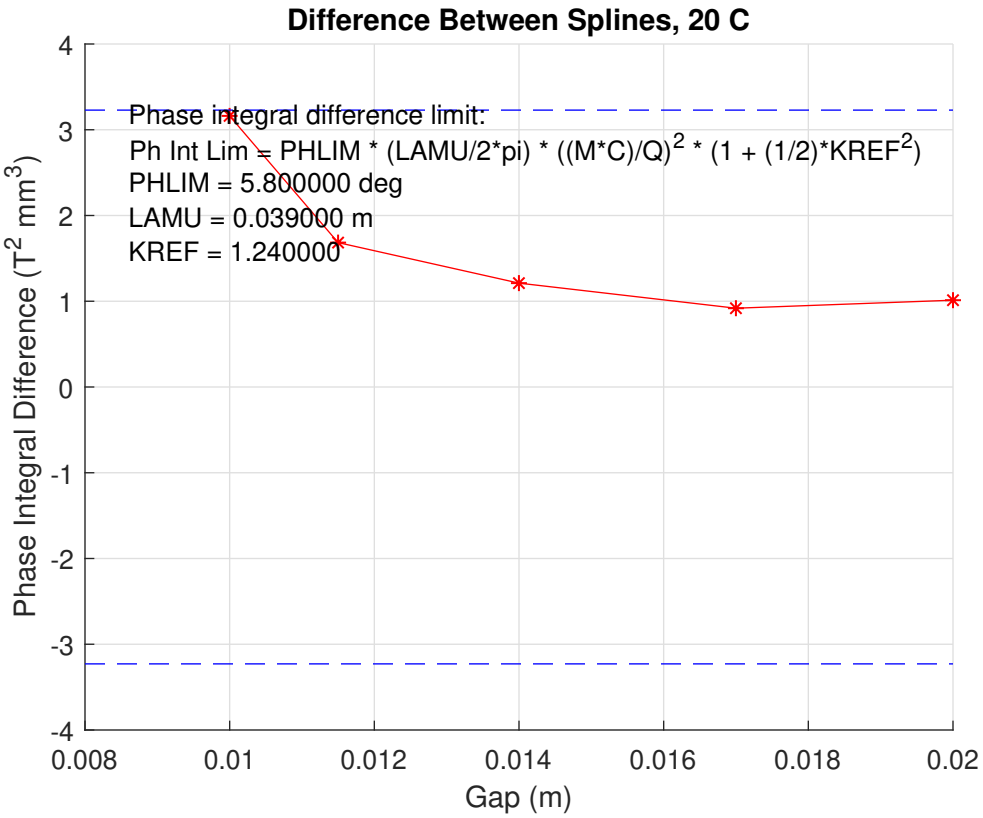
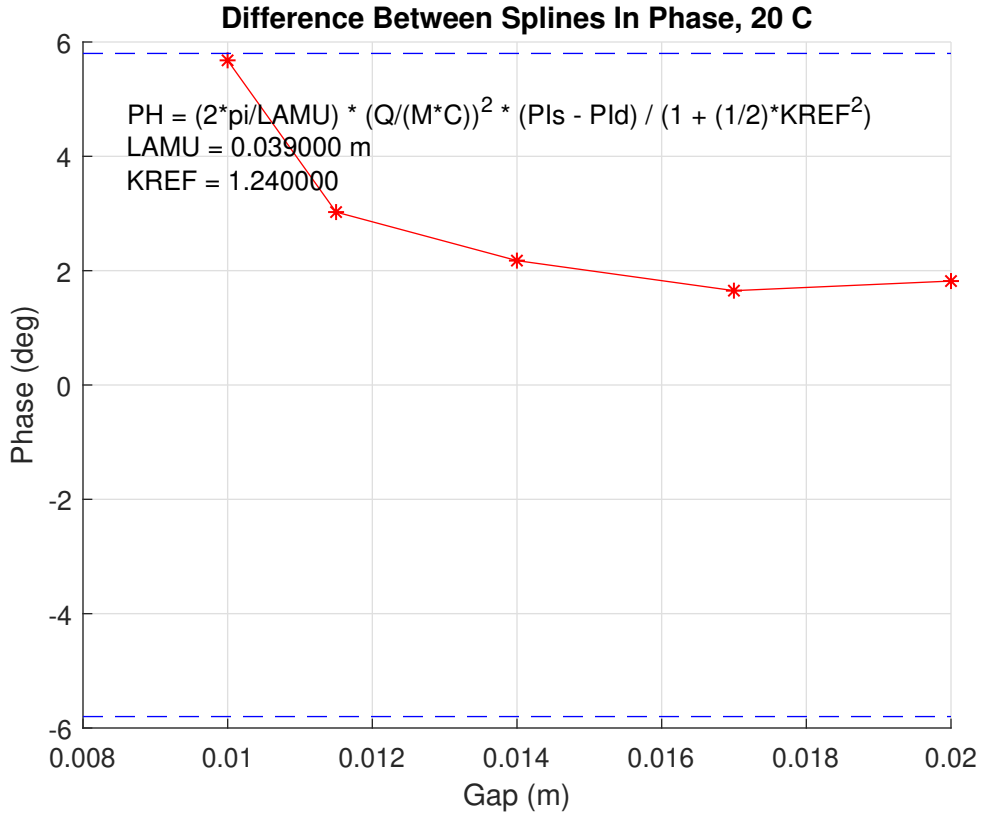
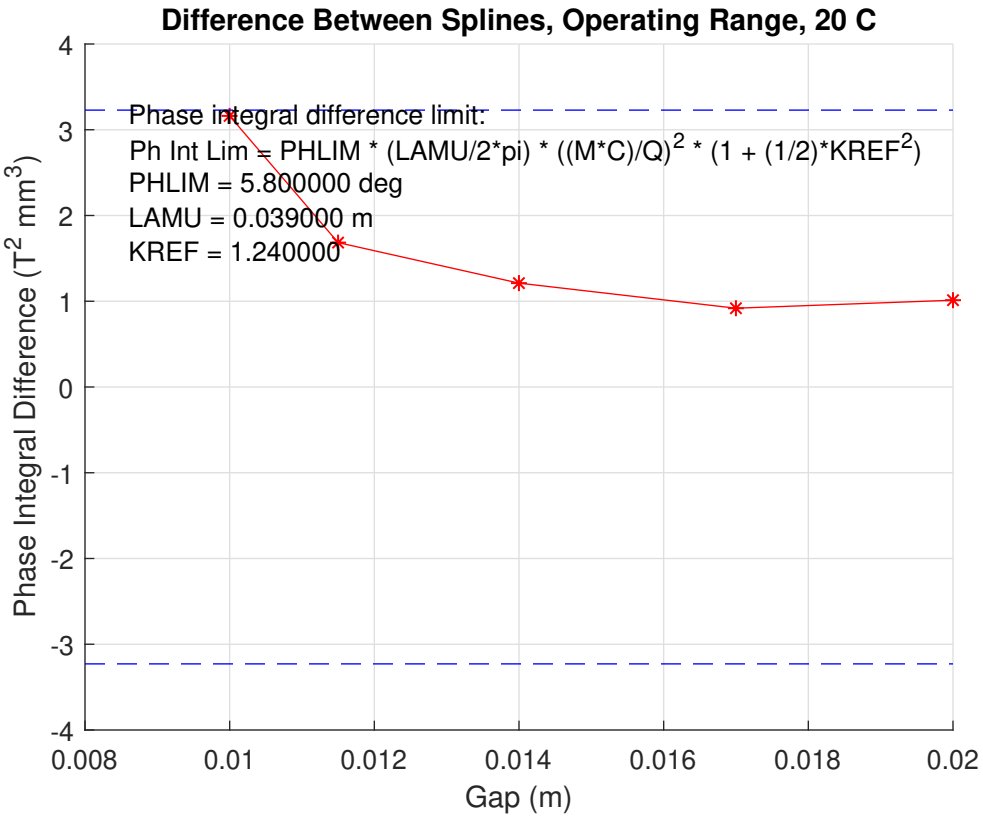
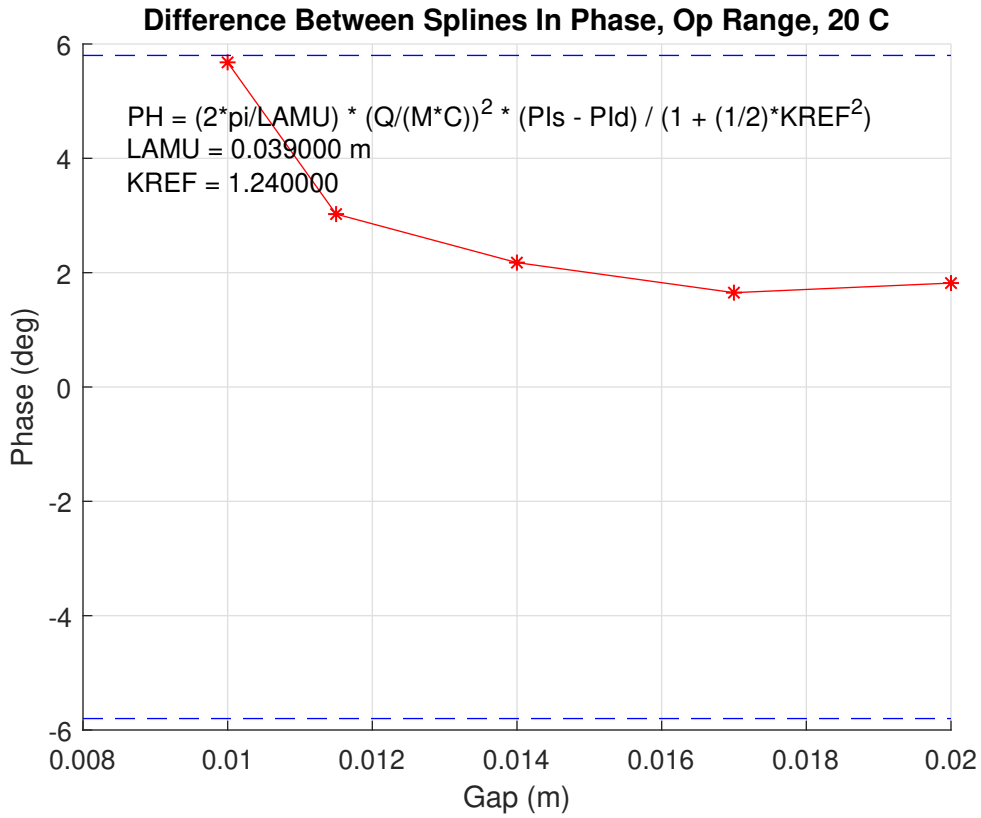
SLAC Magnetic Measurements#
Date: 09-28-2018#
Time: 15:05:52#


Spline Fits, PI vs Gap, 20 C
Kugler
Dataset 13
Phase Integral (T^2 mm^3)
Gap (m)
4500
4000
3500
3000
2500
2000
1500
0.008
0.01
0.012
0.014
0.016
0.018
0.02
0.022


Difference Between Splines, 20 C
Phase integral difference limit:
Ph Int Lim = PHLIM * (LAMU/2*pi) * ((M*C)/Q)^2 * (1 + (1/2)*KREF^2)
PHLIM = 5.800000 deg
LAMU = 0.039000 m
KREF = 1.240000
Phase Integral Difference (T^2 mm^3)
Gap (m)
4
3
2
1
0
-1
-2
-3
-4
0.008
0.01
0.012
0.014
0.016
0.018
0.02


Difference Between Splines In Phase, 20 C
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (Pls - Pld) / (1 + (1/2)*KREF^2)
LAMU = 0.039000 m
KREF = 1.240000
Phase (deg)
Gap (m)
6
4
2
0
-2
-4
-6
0.008
0.01
0.012
0.014
0.016
0.018
0.02


Difference Between Splines, Operating Range, 20 C
Phase integral difference limit:
Ph Int Lim = PHLIM * (LAMU/2*pi) * ((M*C)/Q)^2 * (1 + (1/2)*KREF^2)
PHLIM = 5.800000 deg
LAMU = 0.039000 m
KREF = 1.240000
Phase Integral Difference (T^2 mm^3)
Gap (m)
4
3
2
1
0
-1
-2
-3
-4
0.008
0.01
0.012
0.014
0.016
0.018
0.02


Difference Between Splines In Phase, Op Range, 20 C
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (Pls - Pld) / (1 + (1/2)*KREF^2)
LAMU = 0.039000 m
KREF = 1.240000
Phase (deg)
Gap (m)
6
4
2
0
-2
-4
-6
0.008
0.01
0.012
0.014
0.016
0.018
0.02