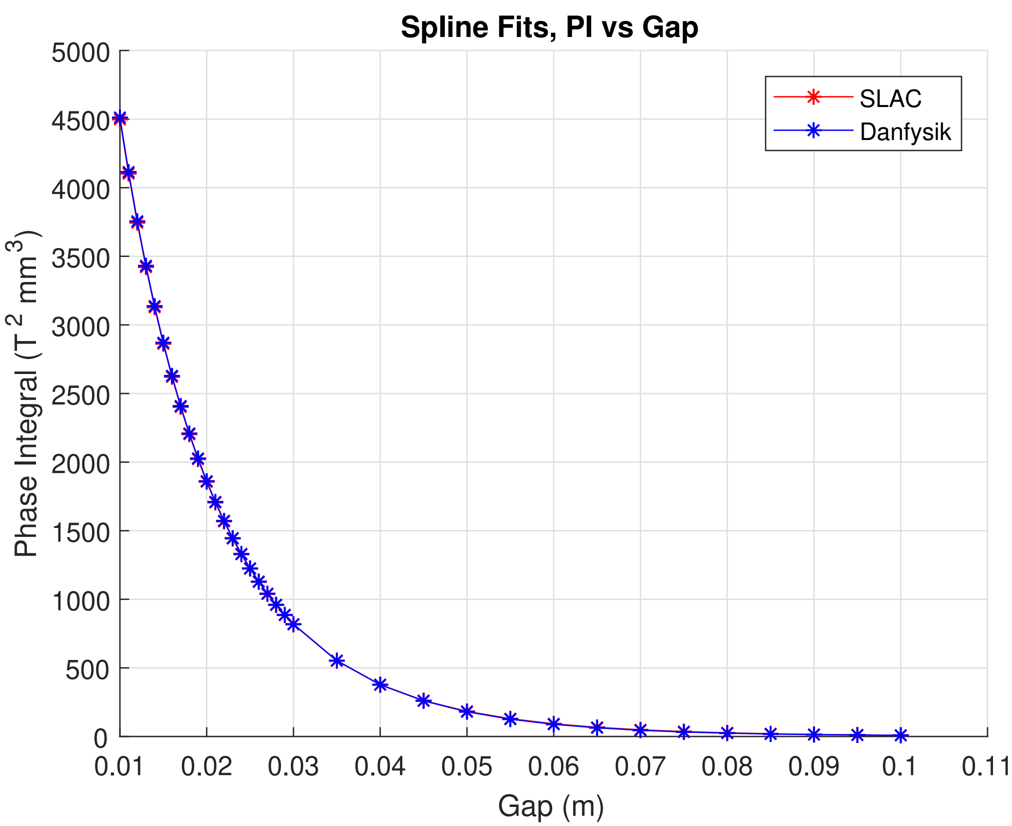
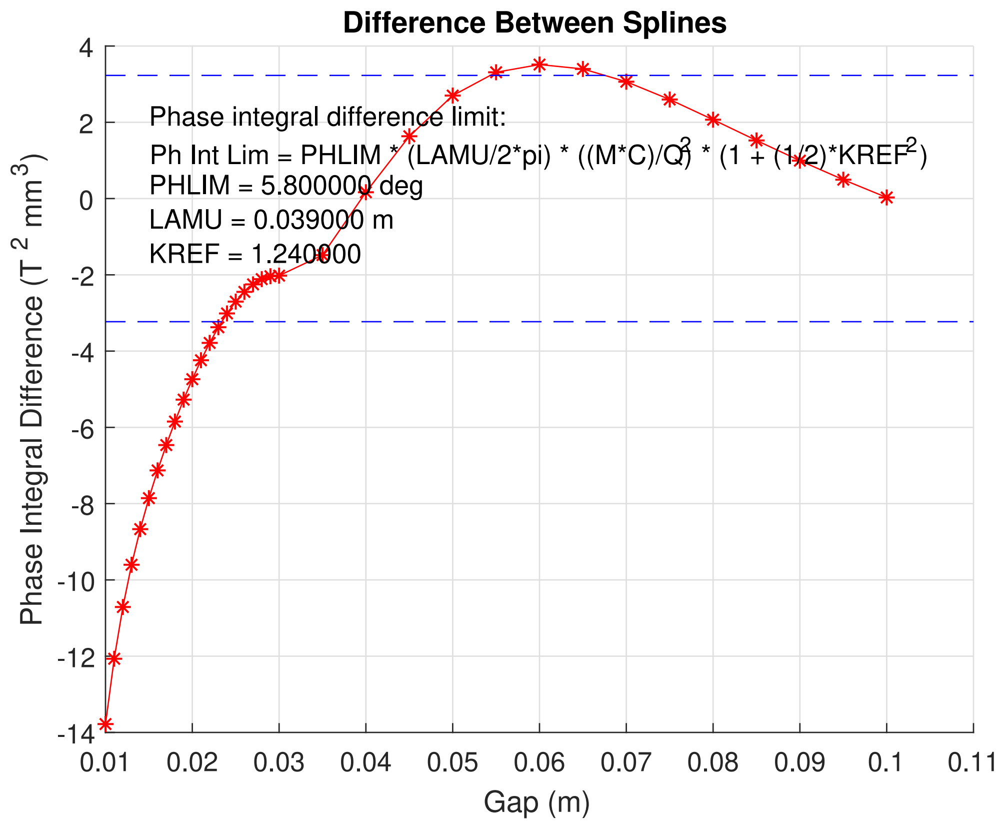
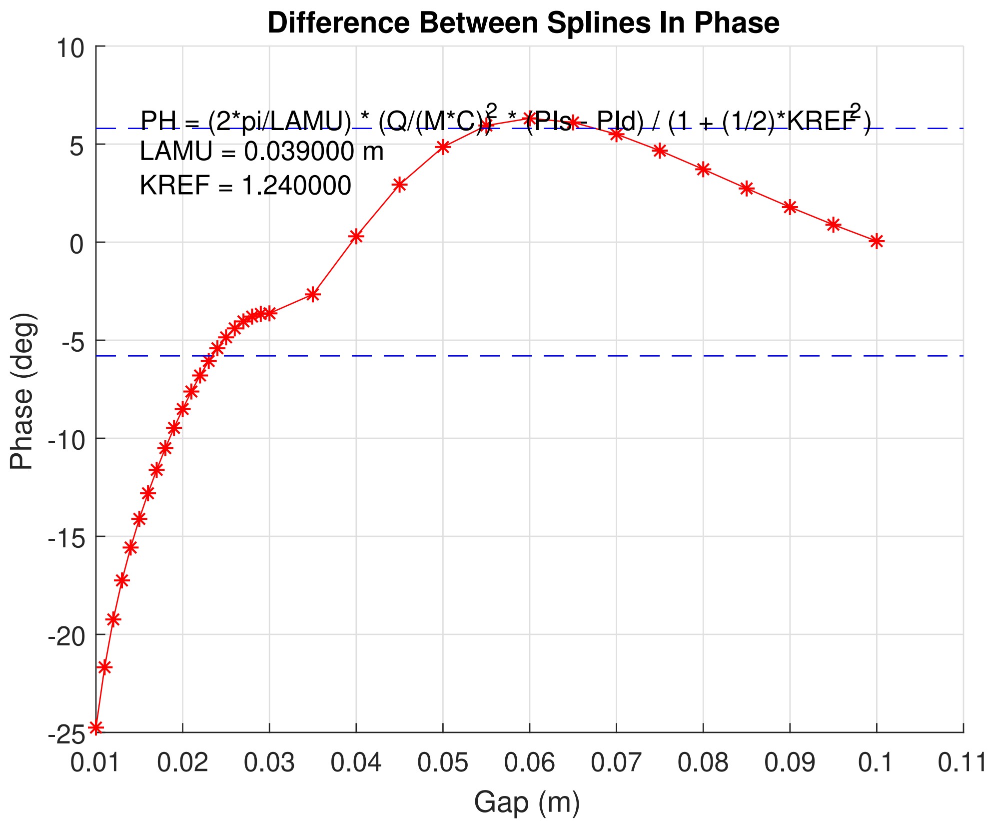
SLAC Magnetic Measurements#
Date: 08-11-2017#
Time: 14:18:28#

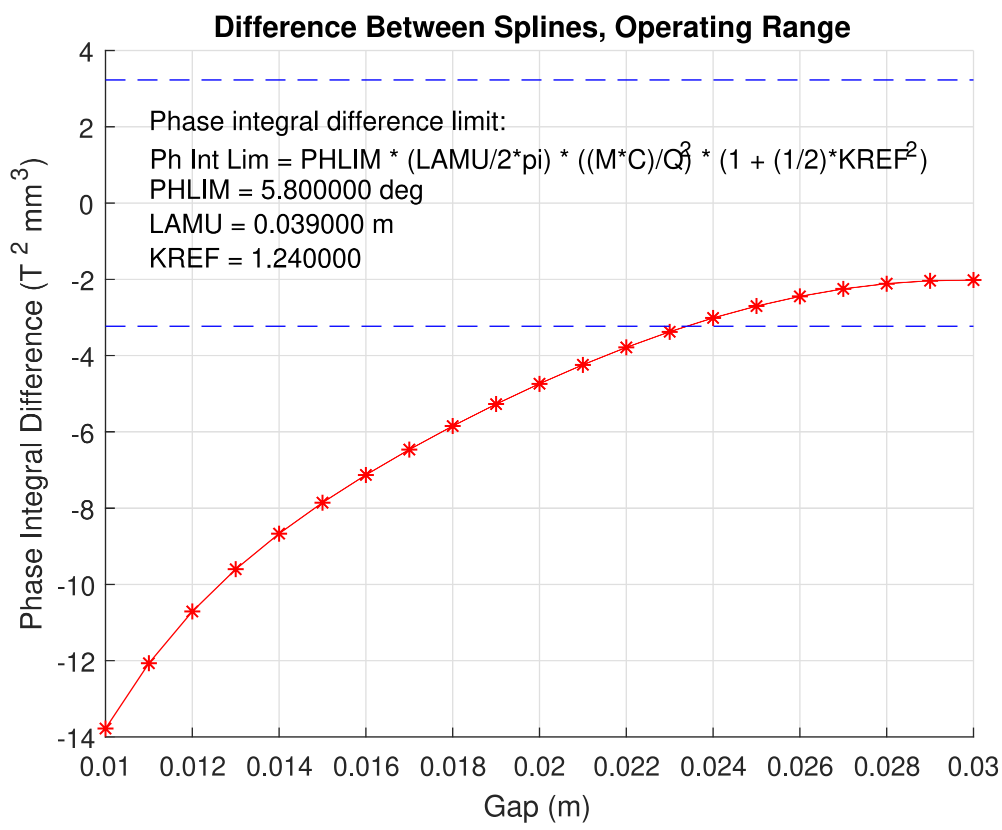

Spline Fits, PI vs Gap
Phase Integral (T 2 mm 3)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
Gap (m)
SLAC
Danfysik



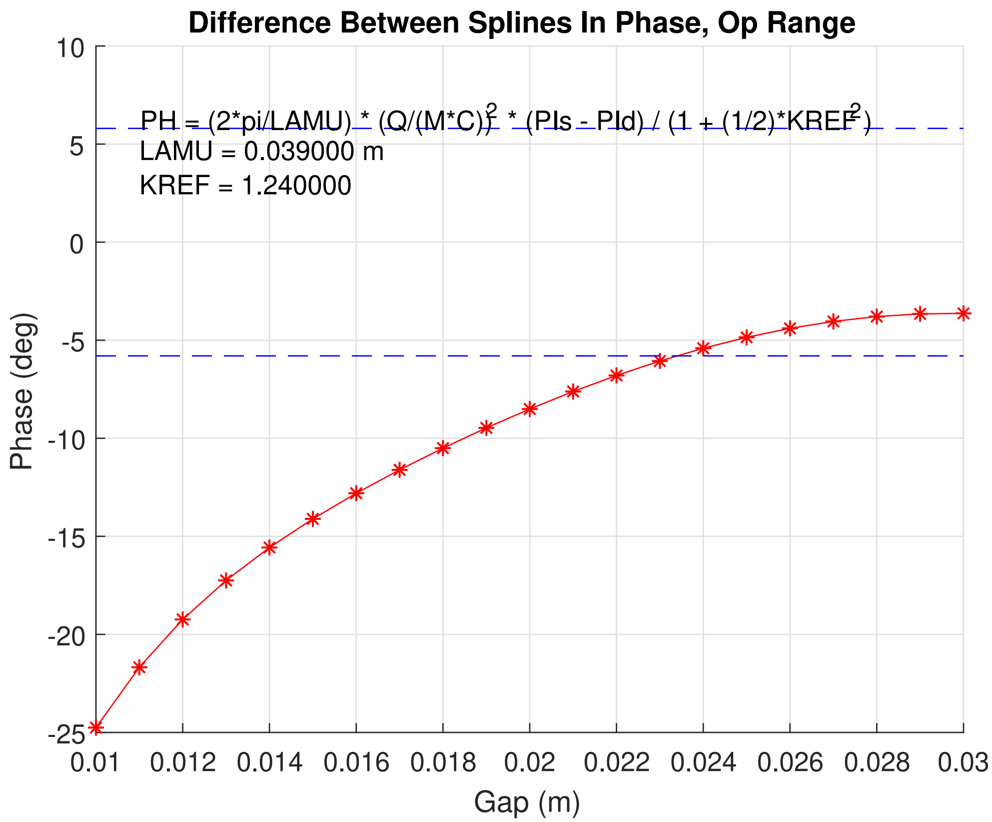
Difference Between Splines
Phase integral difference limit:
Ph Int Lim = PHLIM * (LAMU/2*pi) * ((M*C)/Q)^2 * (1 + (1/2)*KREF^2)
PHLIM = 5.800000 deg
LAMU = 0.039000 m
KREF = 1.240000
Phase Integral Difference (T 2 mm3)
Gap (m)
4
2
0
-2
-4
-6
-8
-10
-12
-14
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11



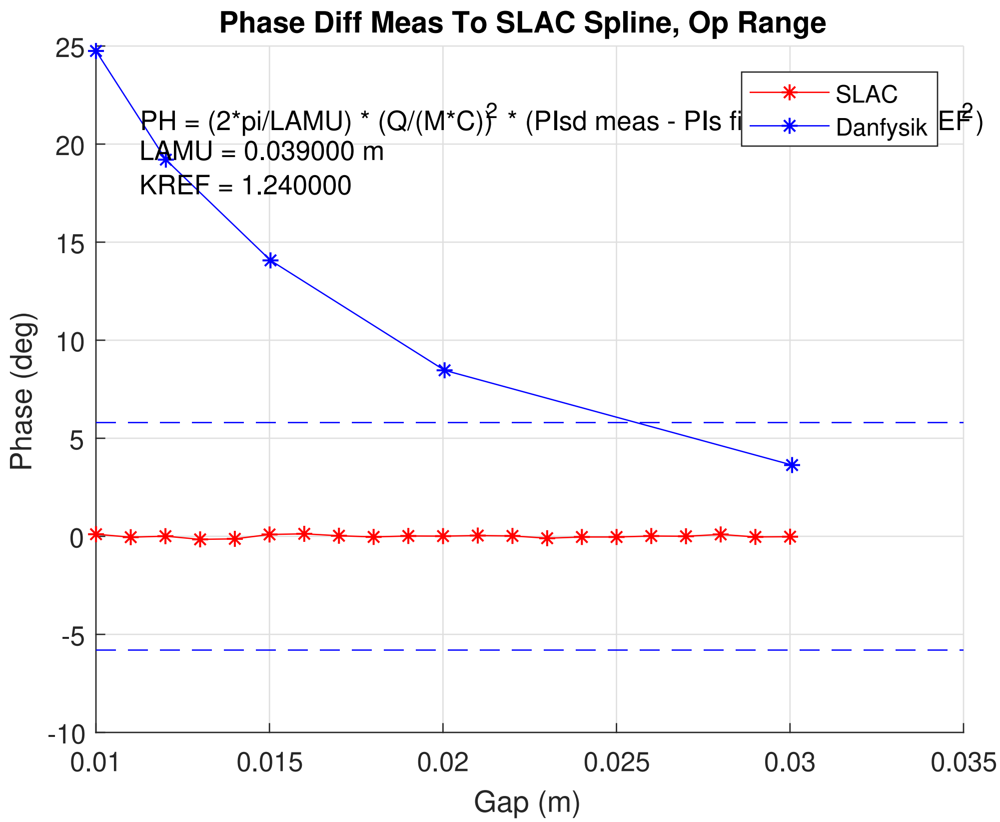
Difference Between Splines In Phase
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (PIs - PId) / (1 + (1/2)*KREF^2)
LAMU = 0.039000 m
KREF = 1.240000
Phase (deg)
Gap (m)
10
5
0
-5
-10
-15
-20
-25
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11



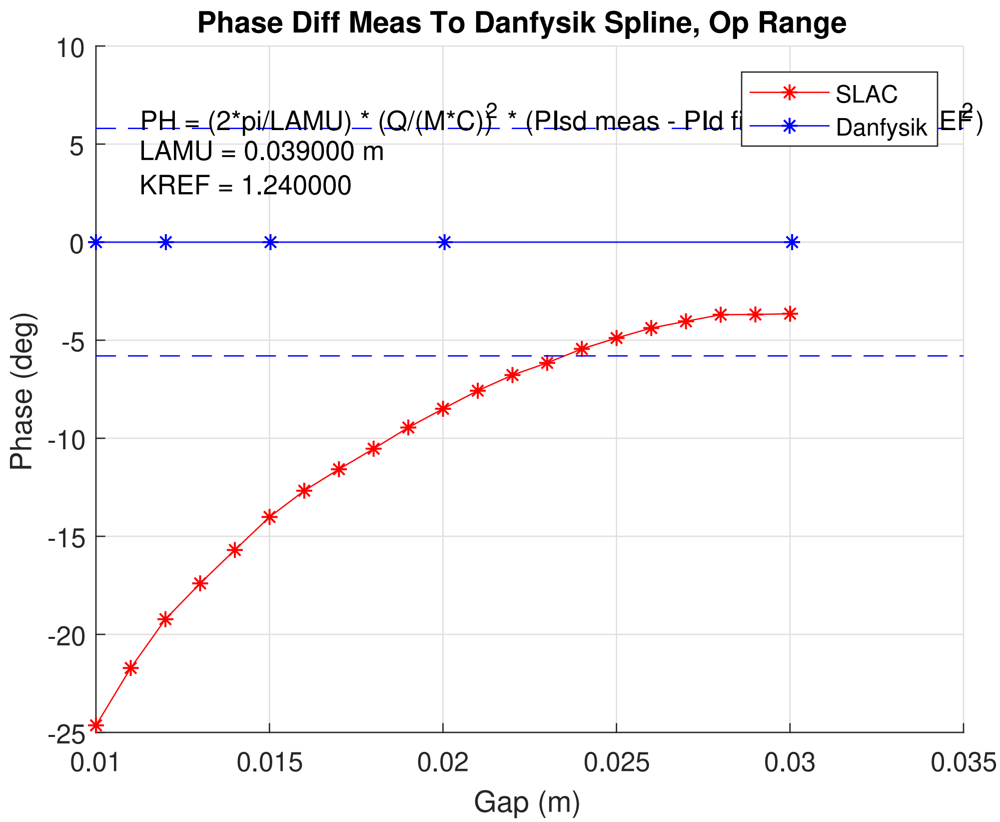
Difference Between Splines, Operating Range
Phase integral difference limit:
Ph Int Lim = PHLIM * (LAMU/2*pi) * ((M*C)/Q)^2 * (1 + (1/2)*KREF^2)
PHLIM = 5.800000 deg
LAMU = 0.039000 m
KREF = 1.240000
Phase Integral Difference (T^2 mm^3)
Gap (m)
4
2
0
-2
-4
-6
-8
-10
-12
-14
0.01
0.012
0.014
0.016
0.018
0.02
0.022
0.024
0.026
0.028
0.03



Difference Between Splines In Phase, Op Range
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (PIs - PId) / (1 + (1/2)*KREF^2)
LAMU = 0.039000 m
KREF = 1.240000
10
5
0
-5
-10
-15
-20
-25
Phase (deg)
0.01
0.012
0.014
0.016
0.018
0.02
0.022
0.024
0.026
0.028
0.03
Gap (m)



Phase Diff Meas To SLAC Spline, Op Range
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (PIsd meas - PIs fi EF^2)
LAMU = 0.039000 m
KREF = 1.240000
SLAC
Danfysik
Phase (deg)
Gap (m)
25
20
15
10
5
0
-5
-10
0.01
0.015
0.02
0.025
0.03
0.035



Phase Diff Meas To Danfysik Spline, Op Range
SLAC
Danfysik
PH = (2*pi/LAMU) * (Q/(M*C))^2 * (PIsd meas - PId fi EF^2)
LAMU = 0.039000 m
KREF = 1.240000
Phase (deg)
Gap (m)
10
5
0
-5
-10
-15
-20
-25
0.01
0.015
0.02
0.025
0.03
0.035