ap_90MeV_loose_posP posP_0 160 **Entries** 1110 Mean -0.0014140 **RMS** 0.05502 χ^2 / ndf 55.08 / 29 132 ± 5.5 Constant 120 Mean -0.001596 ± 0.000978 Sigma 0.0315 ± 0.0009 100 80 60 40 20 0.6 -0.6 -0.40.2 0.4 0.6

ap_90MeV_L1L1_posP posP_1 45 **Entries** 366 Mean 0.004707 40 **RMS** 0.06732 χ^2 / ndf 16.37 / 22 35 40.7 ± 2.9 Constant Mean 0.002337 ± 0.001851 30 Sigma 0.03347 ± 0.00155 25 20 15 10 5 0<u></u> −0.6 -0.2 -0.40.2 0.4 0.6

ap_90MeV_L1L2_posP posP_2 3 **Entries** 12 Mean -0.0008848**RMS** 0.02033 2.5 χ^2 / ndf 0.3604 / 2 2.614 ± 1.223 Constant Mean -0.005318 ± 0.028465 2 Sigma 0.04487 ± 0.06316 1.5 0.5 0.6 -0.6 -0.4-0.20.2 0.4 0.6

ap_90MeV_L2L2_posP posP_3 3 **Entries** 11 Mean -0.001858**RMS** 0.0236 2.5 χ^2 / ndf 1.551 / 5 1.278 ± 0.561 Constant Mean -0.005935 ± 0.066865 2 Sigma 0.06363 ± 0.14284 1.5 0.5 0.6 -0.6 0.2 -0.40.4 0.6

ap_90MeV_L1L1_loose_posP posP_4 90 **Entries** 705 Mean -0.000662280 **RMS** 0.06125 χ^2 / ndf 30.02 / 27 70 Constant 82.81 ± 4.21 Mean -0.001197 ± 0.001241 60 Sigma 0.03194 ± 0.00105 50 40 30 20 10 _0.6 -0.40.2 0.6 0.4

ap_90MeV_L1L2_loose_posP posP_5 **Entries** 146 Mean -0.005825 **RMS** 0.05099 χ^2 / ndf 23.19 / 18 17.95 ± 2.25 Constant 20 Mean -0.003504 ± 0.002637 Sigma 0.02724 ± 0.00246 15 10 5 0.6 -0.6 -0.40.2 0.4 0.6

ap_90MeV_L2L2_loose_posP posP_6 **Entries** 135 25 Mean 0.003047 **RMS** 0.03846 χ^2 / ndf 19.57 / 18 20 14.19 ± 2.17 Constant Mean -0.002093 ± 0.003260 Sigma 0.03273 ± 0.00417 15 10 5 0.6 -0.6 -0.4-0.20.2 0.4 0.6

ap_90MeV_L1L2_loose_extrap_posP posP_7 **Entries** 85 16 Mean -0.004709**RMS** 0.0383 14 χ^2 / ndf 19.69 / 15 Constant 10.15 ± 1.78 12 Mean 0.0005539 ± 0.0034578 Sigma 0.02626 ± 0.00364 10 8 6 4 2 -0.6 -0.40.2 0.4 0.6

ap_90MeV_L2L2_loose_extrap_posP posP_8 **Entries** 106 18 Mean 0.00266 **RMS** 0.03812 16 χ^2 / ndf 14.28 / 17 11.37 ± 2.00 Constant 14 Mean -0.003836 ± 0.003666 Sigma 0.03247 ± 0.00487 12 10 8 6 4 2 -0.6 -0.4-0.20.2 0.4 0.6