ap_22MeV_loose_posP posP_0 200 **Entries** 1236 Mean 0.002615 180 **RMS** 0.05618 χ^2 / ndf 75.41 / 32 160 Constant 160 ± 6.3 140 -0.0008024 ± 0.0008482 Mean Sigma 0.02854 ± 0.00075 120 100 80 60 40 20 0.6 -0.6 -0.40.2 0.4 0.6

ap_22MeV_L1L1_posP posP_1 80 **Entries** 467 Mean 0.006544 70 **RMS** 0.06483 χ^2 / ndf 37.49 / 24 60 62.83 ± 4.36 Constant Mean -0.000751 ± 0.001348 Sigma 0.02687 ± 0.00139 50 40 30 20 10 0.6 -0.6 -0.40.2 0.4 0.6

ap_22MeV_L1L2_posP posP_2 **Entries** 41 Mean 0.00662 **RMS** 0.03097 6 χ^2 / ndf 5.788 / 9 3.998 ± 0.865 Constant 5 Mean -0.000622 ± 0.013965 Sigma 0.04972 ± 0.01628 4 3 2 -0.4-0.20.2 0.4 0.6

ap_22MeV_L2L2_posP posP_3 **Entries** 20 4 Mean -0.007624**RMS** 0.04386 3.5 χ^2 / ndf 3.53 / 8Constant 1.642 ± 0.457 3 Mean -0.002983 ± 0.073083 Sigma 0.118 ± 0.092 2.5 2 1.5 0.5 -0.20.2 -0.40.4 0.6

ap_22MeV_L1L1_loose_posP posP_4 **Entries** 791 Mean 0.004515 120 **RMS** 0.05982 χ^2 / ndf 57.28 / 29 Constant 104.1 ± 5.5 100 Mean -0.0004163 ± 0.0010647 Sigma 0.02772 ± 0.00108 80 60 40 20 0.6 -0.6 -0.40.2 0.4 0.6

ap_22MeV_L1L2_loose_posP posP_5 **Entries** 341 50 Mean -0.002599**RMS** 0.0495 χ^2 / ndf 17.51 / 21 40 40.69 ± 3.10 Constant Mean -0.001718 ± 0.001804 Sigma 0.03167 ± 0.00169 30 20 10 -0.4-0.20.2 0.4 0.6

ap_22MeV_L2L2_loose_posP posP_6 **Entries** 45 6 Mean -0.001740.03916 **RMS** 5 χ^2 / ndf 8.519 / 12 Constant 4.074 ± 0.900 -0.03084 ± 0.01577 Mean 4 Sigma 0.05732 ± 0.01271 3 2 0.6 -0.6 0.2 -0.40.4 0.6

ap_22MeV_L1L2_loose_extrap_posP posP_7 **Entries** 84 Mean 0.002378 12 **RMS** 0.03341 χ^2 / ndf 11.72 / 13 10 Constant 9.283 ± 1.532 Mean 0.0009894 ± 0.0042911 Sigma 0.03231 ± 0.00458 8 6 4 2 0.6 -0.6 -0.4-0.20.2 0.4 0.6

ap_22MeV_L2L2_loose_extrap_posP posP_8 5 **Entries** 25 Mean -0.01247**RMS** 0.04146 χ^2 / ndf 5.444 / 8 4 2.06 ± 0.58 Constant Mean -0.02512 ± 0.04755 Sigma 0.09611 ± 0.05428 3 2 _0.6 -0.20.2 -0.40.4 0.6