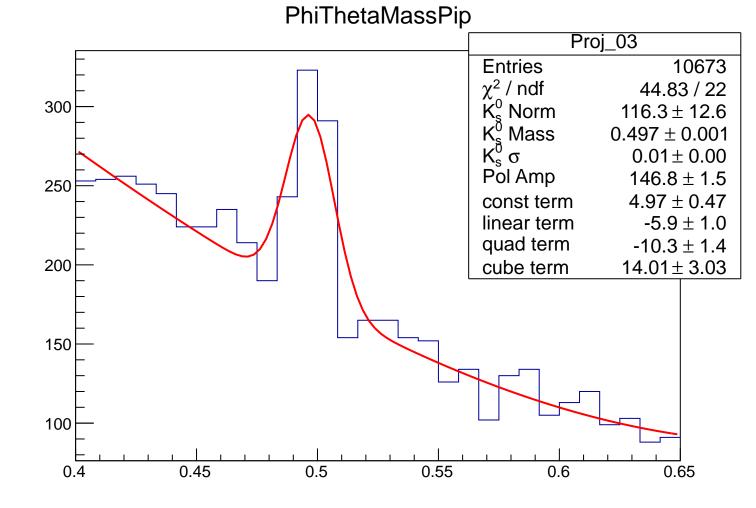
PhiThetaMassPip Proj_00 **Entries** 2396 70 χ^2 / ndf 21.05 / 22 K_s Norm 21.85 ± 5.76 K_s^0 Mass K_s^0 σ 0.501 ± 0.002 60 0.01 ± 0.00 Pol Amp 128.4 ± 0.8 const term 1.369 ± 0.265 50 linear term -1.871 ± 0.553 quad term -2.594 ± 0.802 cube term 4.051 ± 1.639 40 30 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_01 **Entries** 10424 χ^2 / ndf 39 / 22 300 K_s^0 Norm K_s^0 Mass K_s^0 σ 100.8 ± 12.1 0.4987 ± 0.0011 0.01 ± 0.00 Pol Amp 250 151.3 ± 14.7 const term 5.683 ± 0.183 -15.45 ± 0.34 linear term quad term 15.91 ± 0.57 200 -6.379 ± 0.807 cube term 150 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_02 400 **Entries** 11345 χ^2 / ndf 69.61 / 22 K_s⁰ Norm 147.7 ± 13.5 350 K_s Mass 0.4978 ± 0.0009 $K_s^0 \sigma$ 0.01 ± 0.00 300 Pol Amp 153.7 ± 1.3 const term 6.49 ± 0.47 -8.653 ± 1.006 linear term 250 quad term -14.76 ± 1.45 21.95 ± 3.01 cube term 200 150 100 0.4 0.45 0.5 0.55 0.6 0.65



PhiThetaMassPip Proj_04 **Entries** 2821 χ^2 / ndf 20.64 / 22 80 K_s Norm 33.84 ± 6.27 K_s^0 Mass K_s^0 σ 0.503 ± 0.002 70 0.01 ± 0.00 Pol Amp 208.6 ± 30.3 const term 3.751 ± 0.063 60 linear term -16.72 ± 0.12 quad term 26.58 ± 0.20 50 cube term -14.68 ± 0.28 40 30 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_10 **Entries** 12843 280 χ^2 / ndf 37.75 / 22 K_s Norm 46.06 ± 11.39 260 K_s^0 Mass K_s^0 σ 0.501 ± 0.002 0.01 ± 0.00 240 Pol Amp 138.1 ± 1.5 220 const term 5.725 ± 0.502 linear term -7.428 ± 1.094 200 quad term -12.43 ± 1.57 cube term 18.54 ± 3.23 180 160 140 120 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_11 **Entries** 24943 600 χ^2 / ndf 56.07 / 22 K_s⁰ Norm 178.1± 17.2 550 K_s Mass 0.4975 ± 0.0009 $K_s^0 \sigma$ 0.01 ± 0.00 500 Pol Amp 171.1 ± 1.7 const term 11.66 ± 0.53 450 -16.36 ± 1.17 linear term quad term -27.51± 1.66 400 cube term 42.91 ± 3.49 350 300 250 200 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_12 **Entries** 24721 χ^2 / ndf 34.17 / 22 K_s^0 Norm K_s^0 Mass K_s^0 σ 600 162.4 ± 16.7 0.497 ± 0.001 0.01 ± 0.00 Pol Amp 183.2 ± 8.4 500 const term 30.6 ± 0.2 linear term -124.3 ± 0.4 quad term 176 ± 0.6 400 cube term -84.68 ± 0.87 300 200 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_13 600 **Entries** 24665 χ^2 / ndf 58.36 / 22 K_s⁰ Norm 550 162.4 ± 17.0 K_s Mass 0.4993 ± 0.0009 $K_s^{\delta} \sigma$ 500 0.01 ± 0.00 Pol Amp 168.1± 1.6 450 const term 10.7 ± 0.6 -14.23 ± 1.22 linear term 400 quad term -24.07 ± 1.69 35.53 ± 3.58 cube term 350 300 250 200 150⊾ 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_14 300 **Entries** 13250 χ^2 / ndf 24.62 / 22 K_s⁰ Norm 92.45 ± 11.68 K_s^0 Mass K_s^0 σ 0.4997 ± 0.0013 250 0.01 ± 0.00 Pol Amp 162.5 ± 12.6 const term 13.4 ± 0.2 -53.49 ± 0.30 linear term 200 quad term 75.62 ± 0.52 cube term -36.45 ± 0.71 150 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_20 **Entries** 11491 χ^2 / ndf 26.51 / 22 200 K_s⁰ Norm 63.19 ± 10.08 K_s Mass 0.4979 ± 0.0016 $K_s^0 \sigma$ 180 0.01 ± 0.00 Pol Amp 138.1± 1.3 160 const term 4.771 ± 0.430 linear term -6.847 ± 0.913 quad term -11.09 ± 1.33 140 18.04 ± 2.74 cube term 120 100 80 60 0.4 0.45 0.5 0.55 0.6 0.65

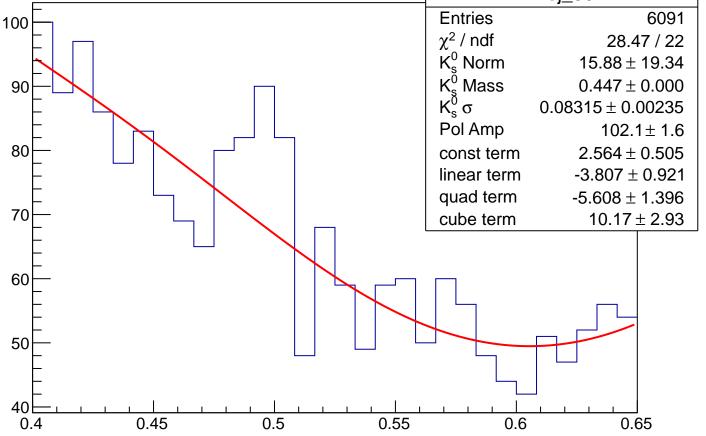
PhiThetaMassPip Proj_21 **Entries** 16812 χ^2 / ndf 55.02 / 22 K_s⁰ Norm 70.18 ± 12.53 300 K_s Mass 0.4982 ± 0.0016 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 144.4 ± 1.4 250 const term 6.261 ± 0.502 linear term -7.992 ± 1.092 quad term -13.54 ± 1.53 cube term 19.65 ± 3.20 200 150 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_22 **Entries** 17155 χ^2 / ndf 26.33 / 22 350 K_s Norm 74.56 ± 12.73 K_s^0 Mass K_s^0 σ 0.5 ± 0.0 0.01 ± 0.00 300 Pol Amp 152.8 ± 1.4 const term 8.181 ± 0.494 linear term -11.46 ± 1.07 250 quad term -18.75 ± 1.48 cube term 28.63 ± 3.11 200 150 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_23 **Entries** 17476 350 χ^2 / ndf 45.28 / 22 K_s⁰ Norm 90.67 ± 12.37 K_s Mass 0.5012 ± 0.0013 300 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 162.4 ± 10.6 const term 17.06 ± 0.16 250 linear term -66.62 ± 0.32 quad term 89.24 ± 0.56 -39.24 ± 0.75 cube term 200 150 100 0.45 0.5 0.55 0.6 0.65 0.4

PhiThetaMassPip Proj_24 **Entries** 12414 220 χ^2 / ndf 47.88 / 22 K_s Norm 60.27 ± 10.26 200 K_s Mass 0.5002 ± 0.0005 $K_s^0 \sigma$ 0.01 ± 0.00 180 Pol Amp 139.2 ± 1.3 const term 5.611 ± 0.448 160 -8.302 ± 0.979 linear term quad term -13.22 ± 1.28 140 21.93 ± 2.75 cube term 120 100 80 60 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_30 **Entries** 6091 χ^2 / ndf 28.47 / 22 K_s⁰ Norm 15.88 ± 19.34 K_s^0 Mass K_s^0 σ 0.447 ± 0.000 0.08315 ± 0.00235 Pol Amp 102.1 ± 1.6 const term 2.564 ± 0.505 linear term -3.807 ± 0.921 quad term -5.608 ± 1.396 cube term 10.17 ± 2.93



PhiThetaMassPip Proj_31 **Entries** 8745 χ^2 / ndf 31.82 / 22 K_s⁰ Norm 45.31 ± 8.64 140 K_s^0 Mass K_s^0 σ 0.5025 ± 0.0020 0.01 ± 0.00 Pol Amp 155.9 ± 19.3 120 const term 5.002 ± 0.131 -18.15 ± 0.24 linear term quad term 24.8 ± 0.4 100 -12.13 ± 0.58 cube term 80 60 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_32 200 **Entries** 9234 χ^2 / ndf 25.39 / 22 180 K_s⁰ Norm 50.23 ± 9.24 K_s^0 Mass K_s^0 σ 0.4989 ± 0.0020 0.01 ± 0.00 160 Pol Amp 138 ± 1.2 const term 4.494 ± 0.416 140 linear term -6.568 ± 0.882 quad term -10.35 ± 1.26 cube term 16.78 ± 2.59 120 100 80 60 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_33 **Entries** 8740 χ^2 / ndf 37.25 / 22 K_s⁰ Norm 38.64 ± 8.73 140 K_s Mass 0.4966 ± 0.0022 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 130.7 ± 1.3 120 const term 3.174 ± 0.400 -4.074 ± 0.839 linear term quad term -6.847 ± 1.308 100 10.27 ± 2.61 cube term 80 60 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_34 **Entries** 6604 χ^2 / ndf 29.46 / 22 110 K_s^0 Norm K_s^0 Mass K_s^0 σ 26.59 ± 7.12 0.5043 ± 0.0031 100 0.01 ± 0.00 Pol Amp 121.5 ± 1.3 const term 3.363 ± 0.379 90 -5.354 ± 0.805 linear term quad term -8 ± 1.2 80 cube term 14.6 ± 2.4 70 60 50 40 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_40 34 **Entries** 1882 χ^2 / ndf 32 27.7 / 22 K_s⁰ Norm 1± 1.2 30 K_s Mass 0.4592 ± 0.0533 $K_s^0 \sigma$ 0.01 ± 0.01 28 Pol Amp 332.8 ± 117.6 26 const term 1.894 ± 0.026 -10.54 ± 0.05 linear term 24 quad term 20.04 ± 0.09 22 cube term -12.65 ± 0.12 20 18 16 14 12 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_41 **Entries** 3093 χ^2 / ndf 60 22.77 / 22 K_s⁰ Norm 15.05 ± 5.17 K_s Mass 55 0.4938 ± 0.0037 $K_s^0 \sigma$ 0.01 ± 0.00 50 Pol Amp 145.9 ± 28.5 const term 2.214 ± 0.080 45 -7.787 ± 0.162 linear term quad term 9.003 ± 0.283 40 cube term -2.751 ± 0.370 35 30 25 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_42 65 **Entries** 3417 χ^2 / ndf 22.33 / 22 60 K_s Norm 8.946 ± 4.972 K_s^0 Mass K_s^0 σ 0.5053 ± 0.0051 55 0.01 ± 0.00 Pol Amp 52.11± 9.78 50 const term -8.83 ± 0.23 linear term 65.38 ± 0.46 45 quad term -140.6 ± 0.8 cube term 95.93 ± 1.06 40 35 30 25 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_43 **Entries** 3360 χ^2 / ndf 16.58 / 22 K_s⁰ Norm 12.6 ± 5.2 60 K_s Mass 0.5005 ± 0.0045 $K_s^0 \sigma$ 0.01 ± 0.01 Pol Amp 440 ± 79.8 const term 4.635 ± 0.027 50 -25.43 ± 0.06 linear term quad term 47.26 ± 0.09 -29.26 ± 0.13 cube term 40 30 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_44 **Entries** 2348 χ^2 / ndf 25.54 / 22 40 K_s⁰ Norm 11.77 ± 4.95 $K_s^{\tilde{0}}$ Mass K_s^{0} σ 0.447 ± 0.003 35 0.01051 ± 0.00918 Pol Amp 606.5 ± 131.9 const term 2.672 ± 0.015 30 linear term -15.16 ± 0.03 quad term 28.94 ± 0.06 cube term -18.29 ± 0.08 25 20 15 10 0.4 0.45 0.5 0.55 0.6 0.65