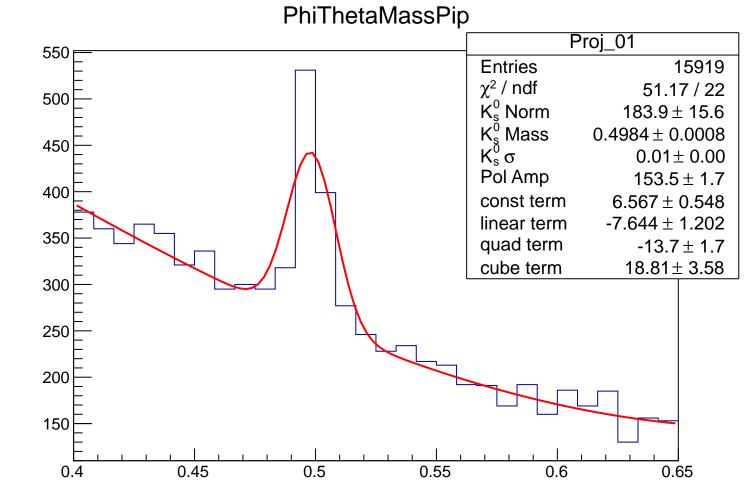
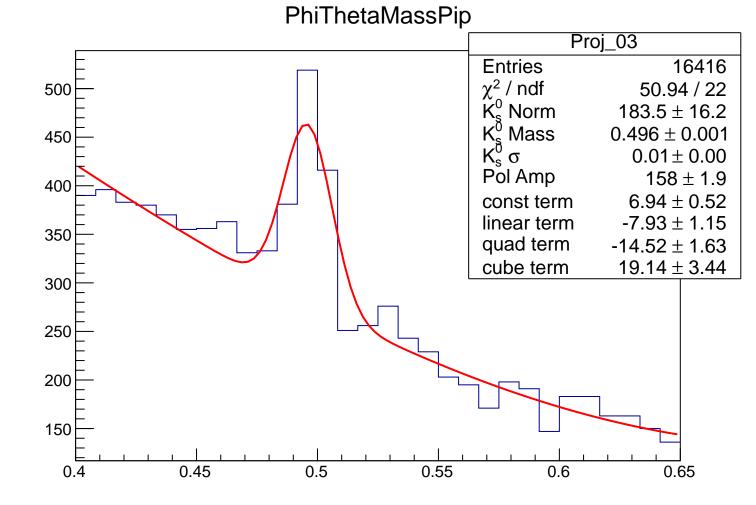
PhiThetaMassPip Proj_00 **Entries** 3699 χ^2 / ndf 110 29.54 / 22 K_s⁰ Norm 36.42 ± 7.13 K_s Mass 100 0.4997 ± 0.0020 $K_s^0 \sigma$ 0.01 ± 0.00 90 Pol Amp 132.6 ± 1.0 const term 2.377 ± 0.316 80 linear term -3.411 ± 0.662 quad term -5.249 ± 0.968 70 cube term 8.464 ± 1.973 60 50 40 30 0.4 0.45 0.5 0.55 0.6 0.65



PhiThetaMassPip Proj_02 600 **Entries** 17415 χ^2 / ndf 61.65 / 22 550 K_s⁰ Norm 235.8 ± 16.9 K_s Mass 0.4974 ± 0.0007 500 $K_s^{\delta} \sigma$ 0.01 ± 0.00 Pol Amp 164.4 ± 1.6 450 const term 8.994 ± 0.534 linear term -12.04 ± 1.17 400 quad term -20.55 ± 1.66 cube term 30.95 ± 3.48 350 300 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65



PhiThetaMassPip Proj_04 **Entries** 4414 120 χ^2 / ndf 25.19 / 22 K_s⁰ Norm 45.21 ± 7.69 K_s Mass 0.5003 ± 0.0019 $K_s^0 \sigma$ 100 0.01 ± 0.00 Pol Amp 203.9 ± 24.2 const term 5.635 ± 0.082 -24.73 ± 0.15 linear term 80 quad term 38.84 ± 0.26 cube term -21.16 ± 0.36 60 40 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_10 **Entries** 19638 400 χ^2 / ndf 40.59 / 22 K_s⁰ Norm 88.44 ± 14.25 K_s Mass 0.4984 ± 0.0015 $K_s^0 \sigma$ 350 0.01 ± 0.00 Pol Amp 148.5 ± 1.7 const term 7.701 ± 0.554 300 linear term -9.737 ± 1.217 quad term -16.89 ± 1.73 cube term 24.81 ± 3.63 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_11 1000 **Entries** 38034 χ^2 / ndf 85.24 / 22 K_s⁰ Norm 301 ± 21.6 900 K_s Mass 0.4972 ± 0.0007 $K_s^{\delta} \sigma$ 0.01 ± 0.00 800 Pol Amp 361.9 ± 0.8 const term 8.167 ± 0.357 700 -11.45 ± 0.75 linear term quad term -18.93 ± 1.08 cube term 29.6 ± 2.2 600 500 400 300 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_12 **Entries** 37608 χ^2 / ndf 51.33 / 22 900 K_s⁰ Norm 224.5 ± 20.6 K_s Mass 0.4965 ± 0.0009 800 $K_s^{\delta} \sigma$ 0.01 ± 0.00 Pol Amp 362.8 ± 0.8 const term 9.151 ± 0.363 700 -12.98 ± 0.76 linear term quad term -21.21± 1.07 600 32.86 ± 2.19 cube term 500 400 300 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_13 **Entries** 37712 900 χ^2 / ndf 69.44 / 22 K_s⁰ Norm 264.1± 20.5 K_s Mass 0.4978 ± 0.0008 800 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 402.1± 16.7 700 const term 19.51 ± 0.11 -81.6 ± 0.2 linear term quad term 121.4 ± 0.4 600 -62.47 ± 0.49 cube term 500 400 300 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_14 **Entries** 20611 450 χ^2 / ndf 33.92 / 22 K_s Norm 131.6 ± 14.9 K_s^0 Mass K_s^0 σ 0.4999 ± 0.0011 400 0.01 ± 0.00 Pol Amp 156.1± 1.5 350 const term 8.588 ± 0.529 -11.37 ± 1.16 linear term quad term -19.27 ± 1.63 300 28.74 ± 3.42 cube term 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_20 **Entries** 17718 320 χ^2 / ndf 25.93 / 22 300 K_s⁰ Norm 86.48 ± 12.62 K_s Mass 0.4957 ± 0.0015 280 $K_s^0 \sigma$ 0.01 ± 0.00 260 Pol Amp 144.8 ± 1.7 const term 6.685 ± 0.495 240 -9.401 ± 1.074 linear term quad term -15.47 ± 1.54 220 24.86 ± 3.21 cube term 200 180 160 140 120 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_21 **Entries** 26250 500 χ^2 / ndf 61.55 / 22K_s⁰ Norm 101.8 ± 15.4 450 K_s Mass 0.4976 ± 0.0014 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 156.9 ± 1.6 400 const term 9.483 ± 0.550 -12.43 ± 1.21 linear term 350 quad term -21.21± 1.69 31.39 ± 3.57 cube term 300 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_22 **Entries** 26534 χ^2 / ndf 33.3 / 22 550 K_s⁰ Norm 103.2 ± 15.6 K_s Mass 500 0.4982 ± 0.0014 $K_s^0 \sigma$ 0.01 ± 0.00 450 Pol Amp 166.6 ± 1.4 const term 11.42 ± 0.53 400 linear term -15.94 ± 1.15 quad term -26.22 ± 1.58 350 39.89 ± 3.36 cube term 300 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_23 **Entries** 27055 550 χ^2 / ndf 50.39 / 22 K_s⁰ Norm 116.1± 15.6 500 K_s Mass 0.4999 ± 0.0012 $K_s^0 \sigma$ 0.01 ± 0.00 450 Pol Amp 164.2 ± 1.7 const term 11.35 ± 0.53 400 linear term -16.26 ± 1.17 quad term -26.87 ± 1.65 350 cube term 42.53 ± 3.48 300 250 200 150 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_24 350 **Entries** 19139 χ^2 / ndf 50.28 / 22 K_s⁰ Norm 82.82 ± 12.73 K_s^0 Mass K_s^0 σ 0.5009 ± 0.0014 300 0.01 ± 0.00 Pol Amp 147.9 ± 1.8 const term 7.671 ± 0.508 250 -11.05 ± 1.11 linear term quad term -17.8 ± 1.6 cube term 28.9 ± 3.3 200 150 100 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_30 **Entries** 9565 χ^2 / ndf 42.86 / 22 K_s⁰ Norm 106.8 ± 67.2 140 K_s^0 Mass K_s^0 σ 0.5261 ± 0.0127 0.08999 ± 0.07999 Pol Amp 104.8 ± 18.4 120 const term 10.75 ± 3.28 linear term -25.59 ± 12.91 quad term -14.07 ± 12.06 cube term 44.55 ± 11.75 100 80 60 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_31 **Entries** 13671 χ^2 / ndf 32.12 / 22 220 K_s⁰ Norm 58.22 ± 10.93 K_s^0 Mass K_s^0 σ 0.5019 ± 0.0019 200 0.01 ± 0.00 Pol Amp 135.7 ± 1.6 180 const term 4.174 ± 0.485 linear term -4.817 ± 1.051 160 quad term -8.395 ± 1.493 11.43 ± 3.11 cube term 140 120 100 80 0.4 0.45 0.5 0.55 0.6 0.65

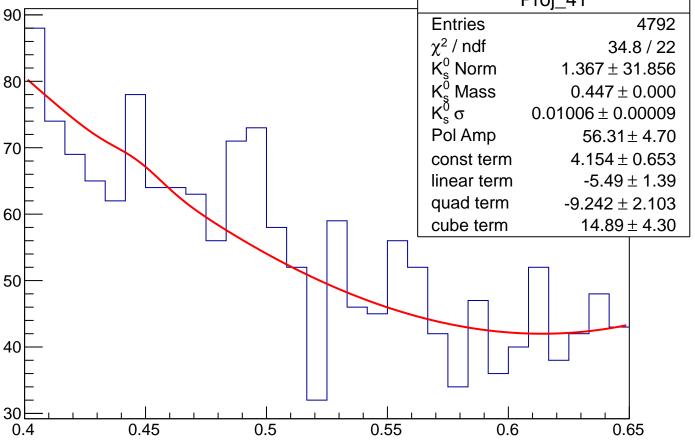
PhiThetaMassPip Proj_32 280 **Entries** 14285 χ^2 / ndf 31.6 / 22 260 K_s⁰ Norm 72.23 ± 11.14 K_s Mass 240 0.4978 ± 0.0016 $K_s^{\delta} \sigma$ 0.01 ± 0.00 220 Pol Amp 143.8 ± 1.4 const term 5.922 ± 0.457 200 linear term -8.291 ± 0.983 quad term -13.55 ± 1.40 180 21.22 ± 2.91 cube term 160 140 120 100 80 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_33 240 **Entries** 13853 χ^2 / ndf 34.29 / 22 220 K_s⁰ Norm 61.82 ± 11.10 K_s Mass 0.4979 ± 0.0018 $K_s^0 \sigma$ 200 0.01 ± 0.00 Pol Amp 138.8 ± 1.4 const term 4.933 ± 0.468 180 -6.38 ± 1.00 linear term quad term -10.92 ± 1.47 160 cube term 16.28 ± 3.03 140 120 100 80 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_34 **Entries** 10399 χ^2 / ndf 32.89 / 22 K_s⁰ Norm 160 43.44 ± 9.19 K_s Mass 0.5022 ± 0.0023 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 129.5 ± 1.4 140 const term 4.564 ± 0.434 -6.917 ± 0.929 linear term quad term -10.79 ± 1.36 120 cube term 18.86 ± 2.79 100 80 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_40 **Entries** 2884 50 χ^2 / ndf 24.13 / 22 K_s⁰ Norm 16.25 ± 4.84 K_s Mass 45 0.4967 ± 0.0034 $K_s^0 \sigma$ 0.01 ± 0.01 Pol Amp 258 ± 72.7 40 const term 2.866 ± 0.042 -15.1 ± 0.1 linear term quad term 27.46 ± 0.15 35 cube term -16.62 ± 0.20 30 25 20 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_41 **Entries** 4792 χ^2 / ndf 34.8 / 22 K_s⁰ Norm 1.367 ± 31.856 $K_s^{\tilde{0}}$ Mass K_s^{0} σ 0.447 ± 0.000 0.01006 ± 0.00009 Pol Amp 56.31 ± 4.70 const term 4.154 ± 0.653 linear term -5.49 ± 1.39 quad term -9.242 ± 2.103 cube term 14.89 ± 4.30



PhiThetaMassPip Proj_42 100 **Entries** 5450 χ^2 / ndf 20.84 / 22 K_s⁰ Norm 17.95 ± 6.91 90 K_s Mass 0.5028 ± 0.0038 $K_s^0 \sigma$ 0.01 ± 0.00 80 Pol Amp 121.6 ± 1.2 const term 2.37 ± 0.36 linear term -3.276 ± 0.752 70 quad term -5.481± 1.217 8.873 ± 2.341 cube term 60 50 40 30 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_43 **Entries** 5391 100 χ^2 / ndf 20.61 / 22 K_s⁰ Norm 26.22 ± 6.68 K_s^0 Mass K_s^0 σ 0.4995 ± 0.0030 90 0.01 ± 0.01 Pol Amp 225.1± 34.3 80 const term 9.302 ± 0.068 -48.97 ± 0.14 linear term quad term 88.33 ± 0.23 70 cube term -53.26 ± 0.31 60 50 40 0.4 0.45 0.5 0.55 0.6 0.65

PhiThetaMassPip Proj_44 70 **Entries** 3718 χ^2 / ndf 14.77 / 22 65 K_s⁰ Norm 12.57 ± 5.62 K_s Mass 0.4962 ± 0.0046 60 $K_s^0 \sigma$ 0.01 ± 0.00 Pol Amp 356 ± 64.1 55 const term 4.011 ± 0.037 -20.95 ± 0.07 linear term 50 quad term 37.58 ± 0.13 -22.52 ± 0.17 cube term 45 40 35 30 25 0.4 0.45 0.5 0.55 0.6 0.65