# Comparison of Circle Fitter (Levenberg-Marquardt Method) and New Helix Fitter Results.

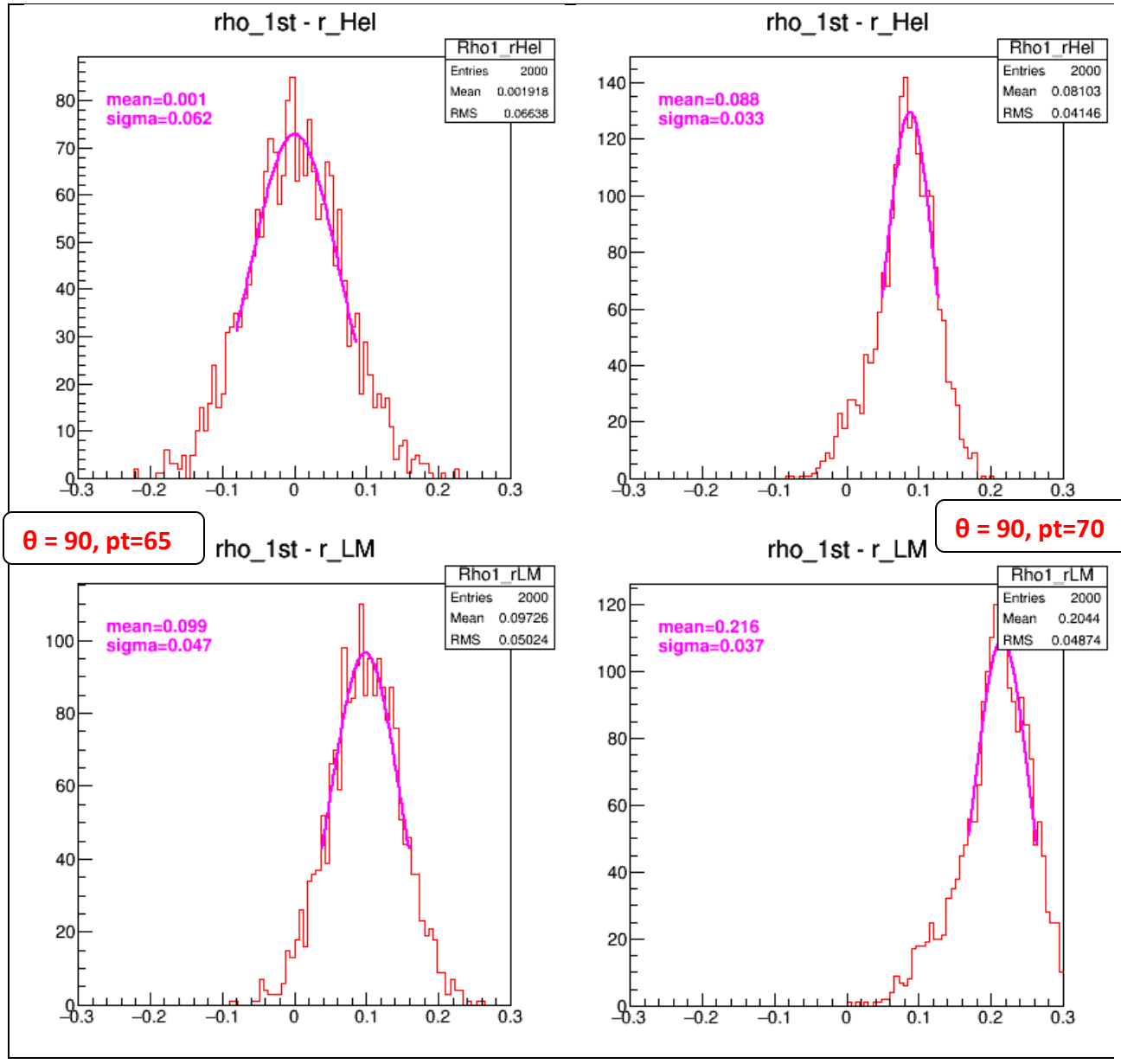


Fig1: θ = 90°, pt = 65 MeV (Left) and pt = 70 MeV (Right)

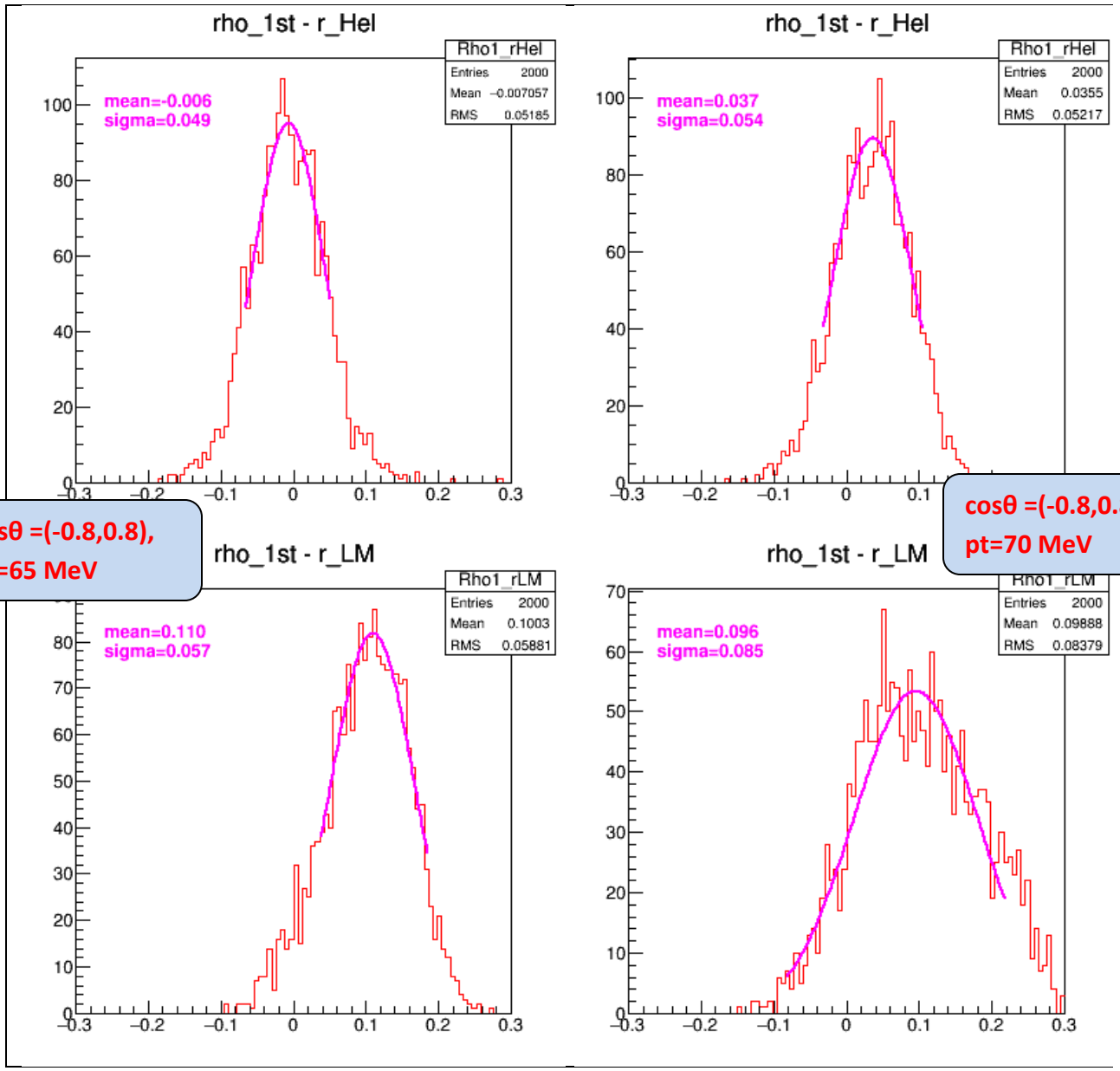


Fig 2: cos(θ) = [-0.8,+0.8], pt = 65 MeV (Left) and pt = 70 MeV (Right)

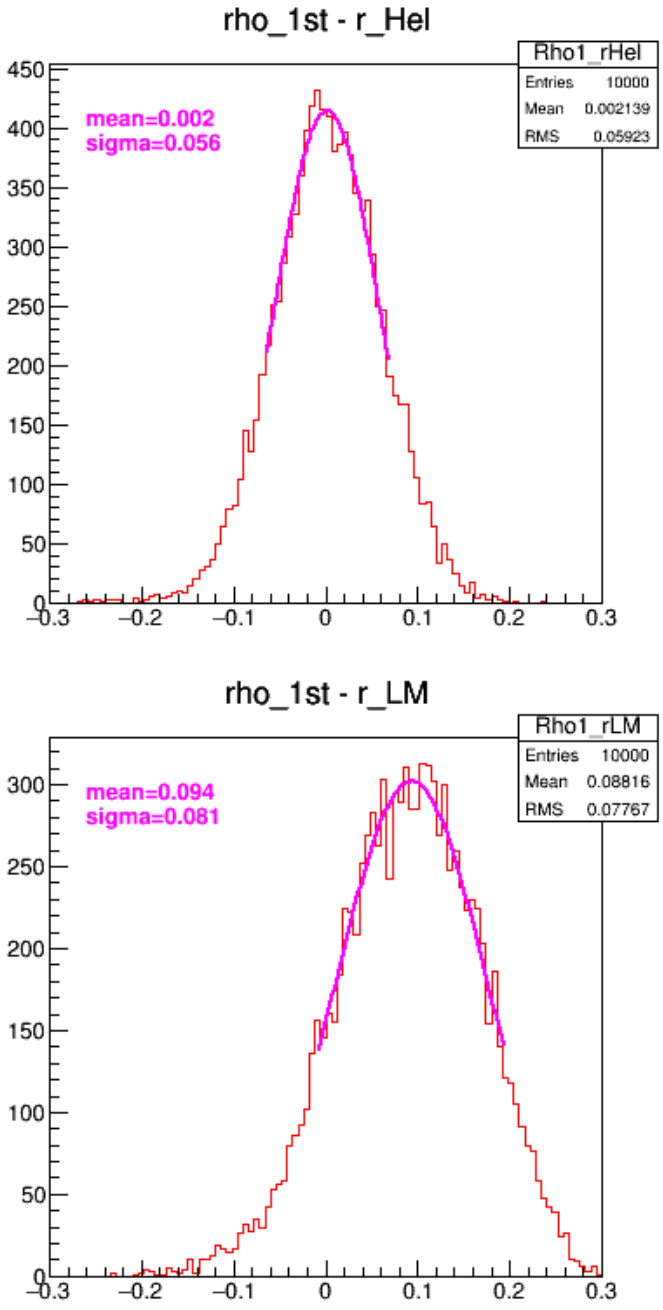


Fig 2: cos(θ) = [-0.8,+0.8], pt = [60,70] MeV

# Conclusion

Although the circle fitter results gave better results than older version of the global helix fitter, the new version of the helix fitter seems to give even better results than the circle fitter. (The new helix fitter is no more a global fitter always, it's rather a partial track fitter if the track curves back i.e. the fitter uses only those hits which excludes those that belongs to the part of the track that curves back. If the track doesn't curve back, then the fitter is still a global fitter).