True P_T – Dependence of AN - Status

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RadLab Meeting

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In the just concluded unfolding analysis work, I demonstrated the unfolding of a 1-dimensional P_T spectrum using singular value decomposition (TSVD) technique incorporated in the ROOT CERN package. However 1-dimensional P_T spectrum unfolding alone is expected to result in an almost flat distribution of the unfolded P_T - dependence of AN. That is, this would result in very small transverse asymmetries. Thus to obtain a reasonable unfolded pT-dependence of AN distribution, we introduce 1 more dimension, the azimuthal angle (phi) distribution, giving rise to a 2-dimension unfolding in terms of azimuthal angle (phi) and transverse momentum (pT) distributions as the next analysis step.

So I am currently working on phi and P_T 2-dimensional unfolding in readiness for computations of the dependence of AN on the unfolded P_T.

BACKUP

Last Spin PWG Meeting Update 2019-09-11

1. https://www.phenix.bnl.gov/cdsagenda/fullAgenda.php?ida=a19281
2. https://www.phenix.bnl.gov/cdsagenda/askArchive.php?base=agenda&categ=a19217&id=a19217s1t173/moreinfo