



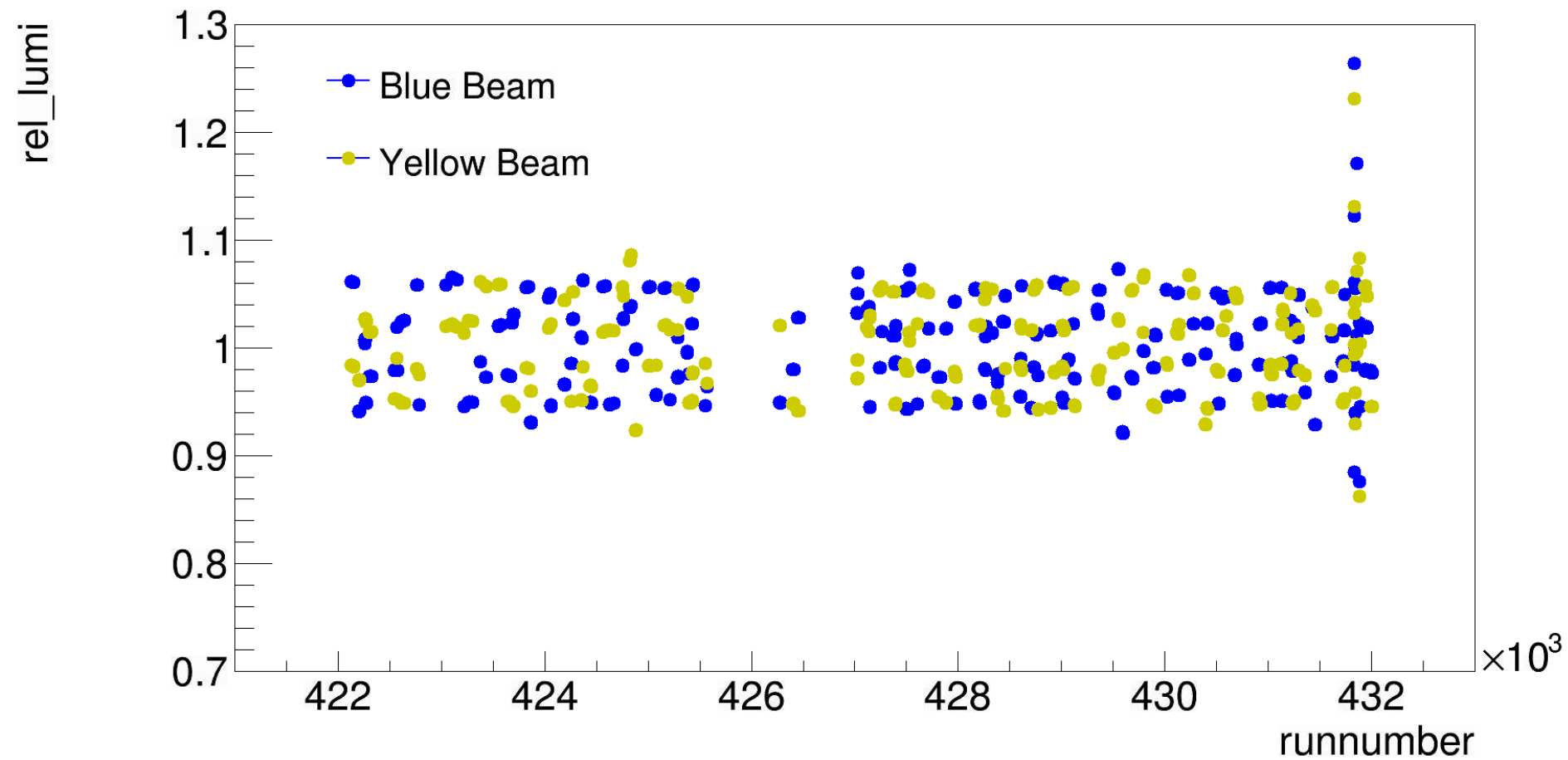
Charged pion analysis

Single Spin Asymmetry



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runnumber = 431831
rellumiB = 1.26445
rellumiY = 1.13172

runnumber = 431834
rellumiB = 1.06055
rellumiY = 1.23175

runnumber = 431835
rellumiB = 0.884932
rellumiY = 0.993677

runnumber = 431837
rellumiB = 1.12222
rellumiY = 1.03227

runnumber = 431859
rellumiB = 1.17176
rellumiY = 1.07103

runnumber = 431886
rellumiB = 0.875942
rellumiY = 1.08292

runnumber = 431888
rellumiB = 1.02352
rellumiY = 0.861929

Fill number

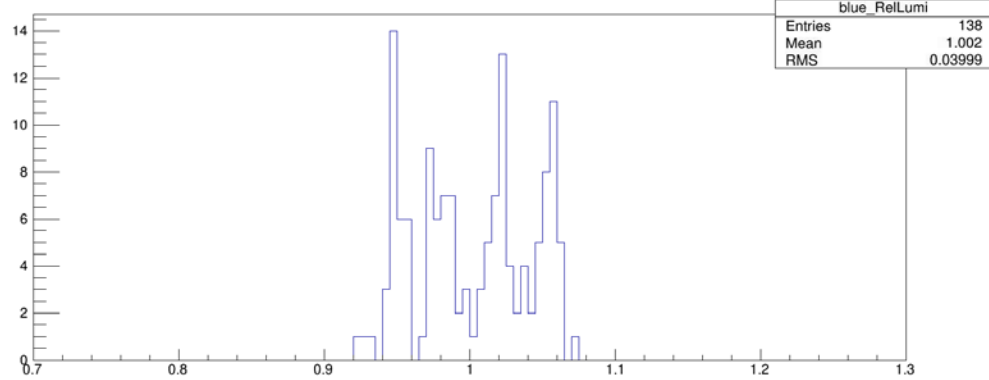


18673	18674	18675	18676	18677	18683	18684	18686	18687	18689
18692	18693	18694	18696	18697	18698	18701	18702	18706	18707
18709	18710	18715	18717	18718	18719	18721	18722	18723	18726
18727	18728	18729	18731	18732	18737	18738	18740	18741	18749
18750	18751	18752	18753	18754	18758	18776	18778	18779	18780
18785	18787	18788	18789	18790	18792	18793	18794	18795	18796
18797	18798	18800	18801	18803	18804	18805	18807	18815	18816
18818	18819	18820	18827	18828	18829	18837	18838	18843	18846
18847	18848	18849	18850	18852	18853	18854	18855	18856	18857
18865	18868	18875	18876	18877	18878	18881	18882	18883	18884
18892	18893	18894	18895	18897	18898	18900	18901	18903	18904
18905	18906	18908	18909	18914	18915	18916	18917	18920	18921
18922	18923	18924	18925	18926	18928	18930	18931	18942	18943
18944	18946	18948	18949	18950	18951	18952	18953	0	0

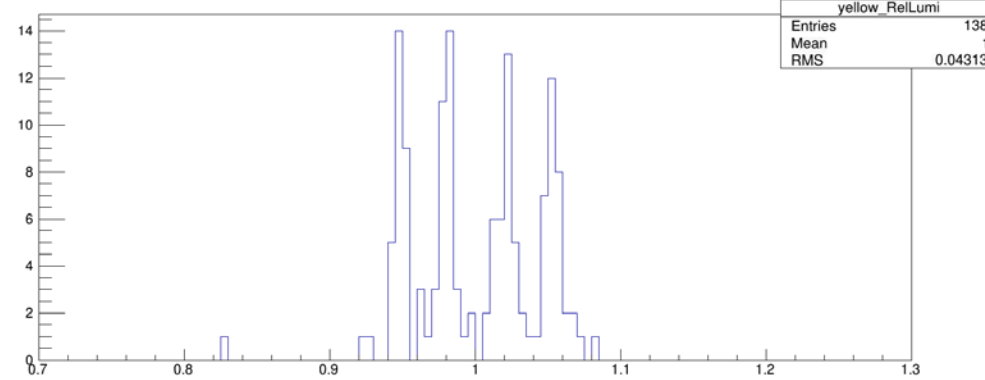
675 runs
-> 138 fills

Rel_lumi and Polarization

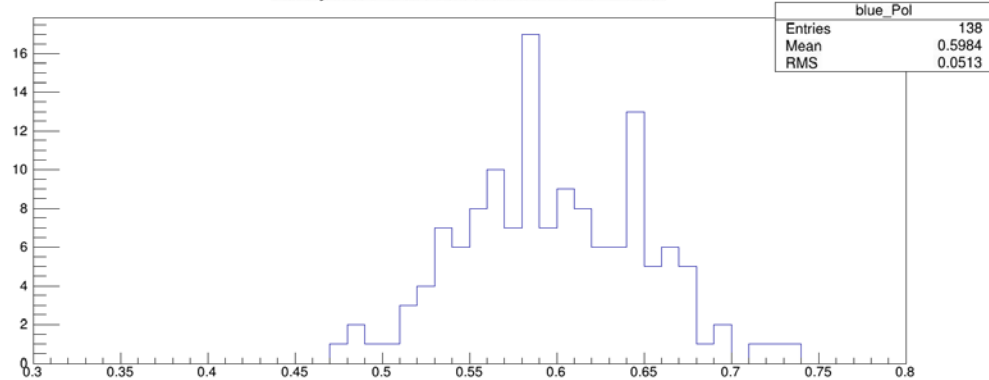
Fill by Fill Rel Lumi of the Blue Beam



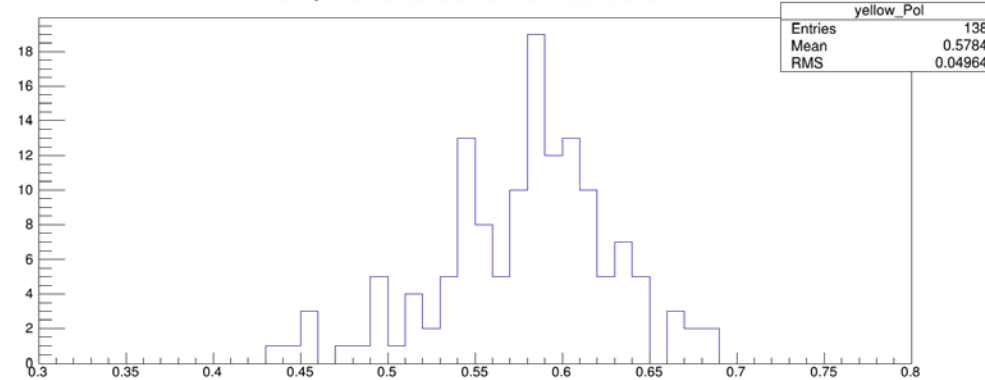
Fill by Fill Re Lumi of the Yellow Beam



Fill by Fill Polarization of the Blue Beam

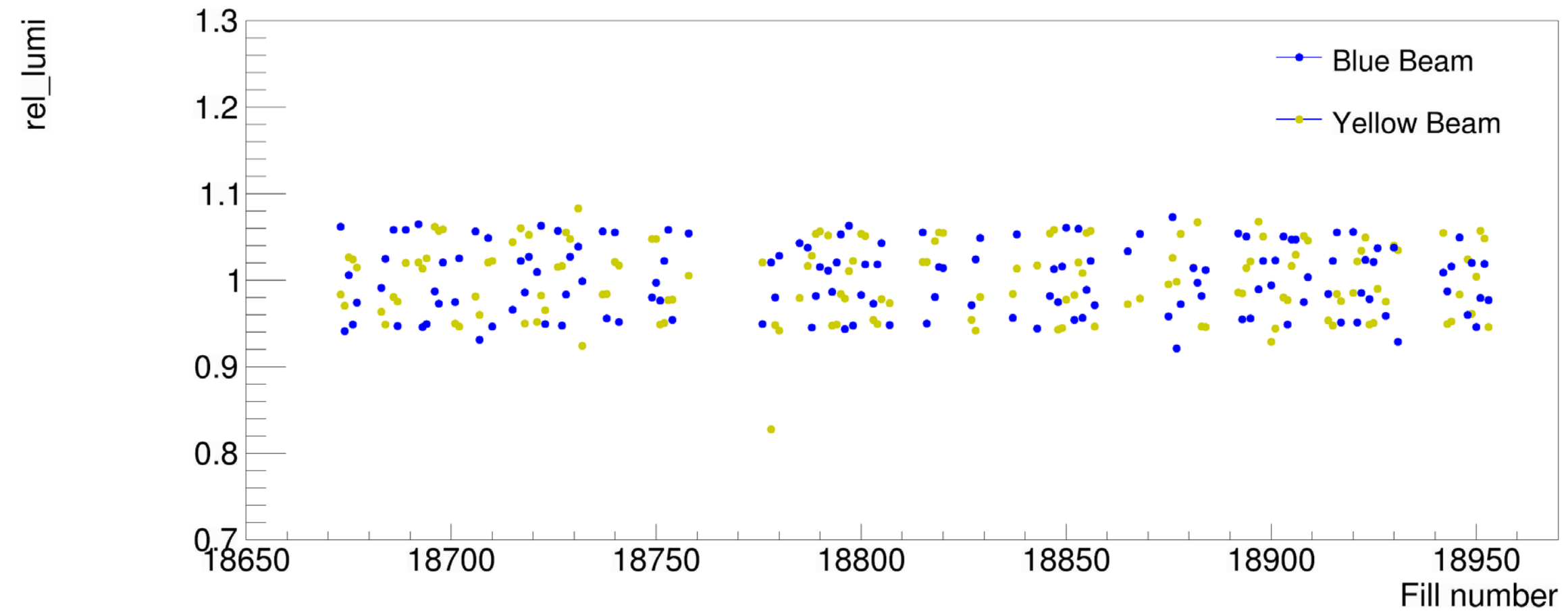


Fill by Fill Polarization of the Yellow Beam



- CNI polarimetry group and GL1P scaler information used for calculating the relative luminosity,

Rel_lumi vs filnumber



Fill number = 18778

rellumiB = 1.02079

rellumiY = 0.827717

- I will calculate by using weighted averaging method.
 - > run by run → fill by fill
- and compare with Square Root Formula.



Thank you.



BACK UP

Rel. luminosity

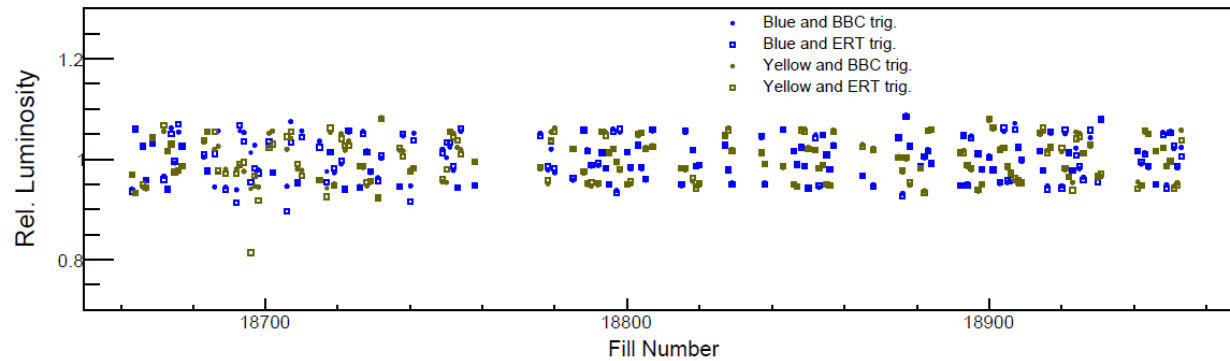


Figure 41: Relative luminosity factor calculated for each fill in Run-15 $p + p$.

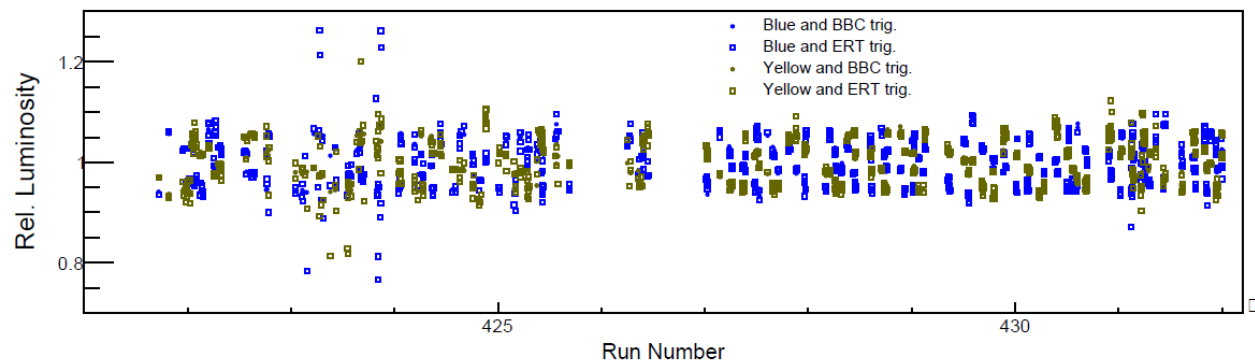
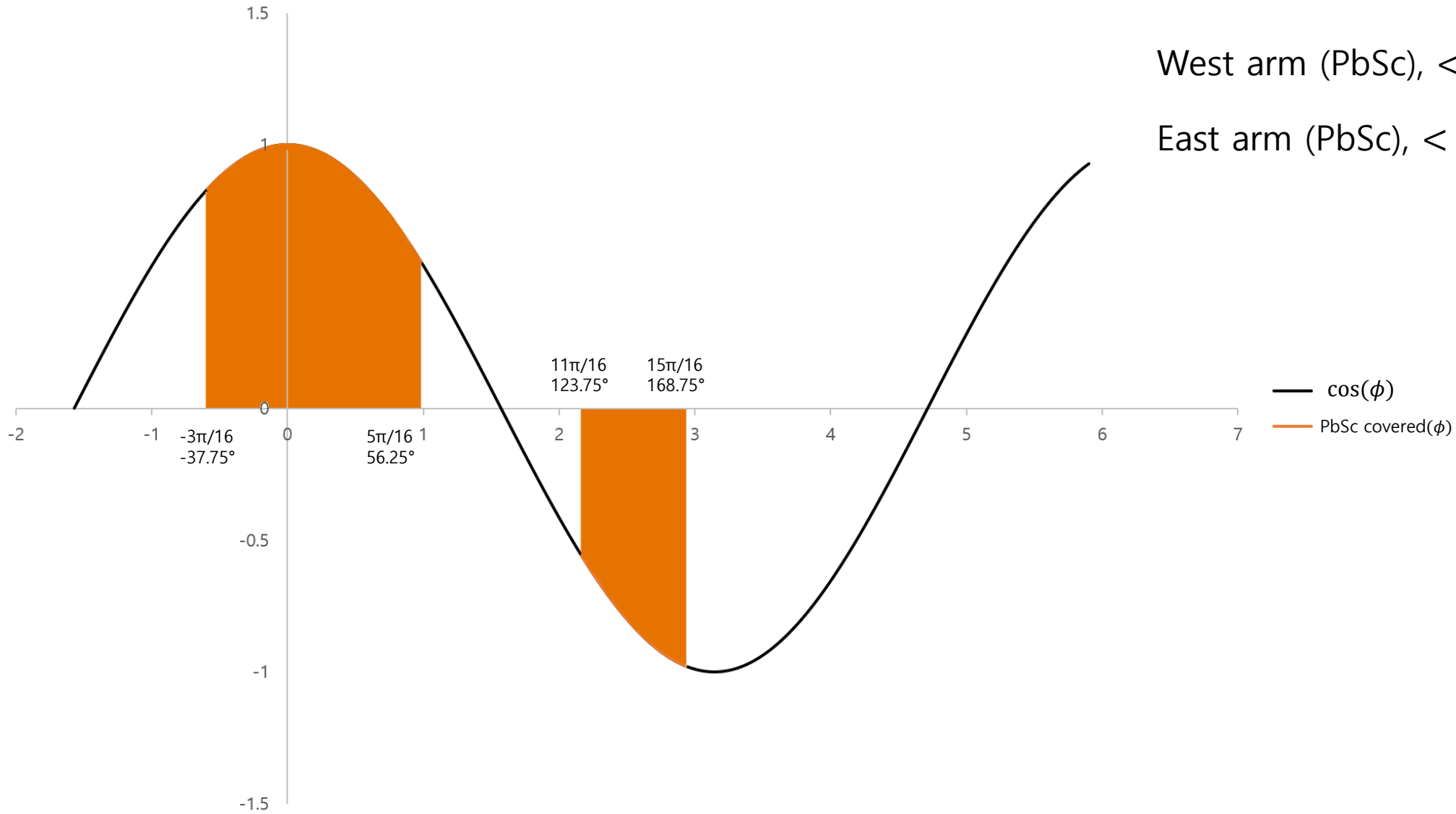


Figure 42: Relative luminosity factor calculated for each run in Run-15 $p + p$.



West arm (PbSc), $\langle |\cos(\phi_1)| \rangle = 0.883017$

East arm (PbSc), $\langle |\cos(\phi_2)| \rangle = 0.40513$