

Measurement of charged jet spectra in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ALICE at LHC

Started by Hiroki Yokoyama

Change in the data set :

AOD 194 with different pass → AOD 252 pass2

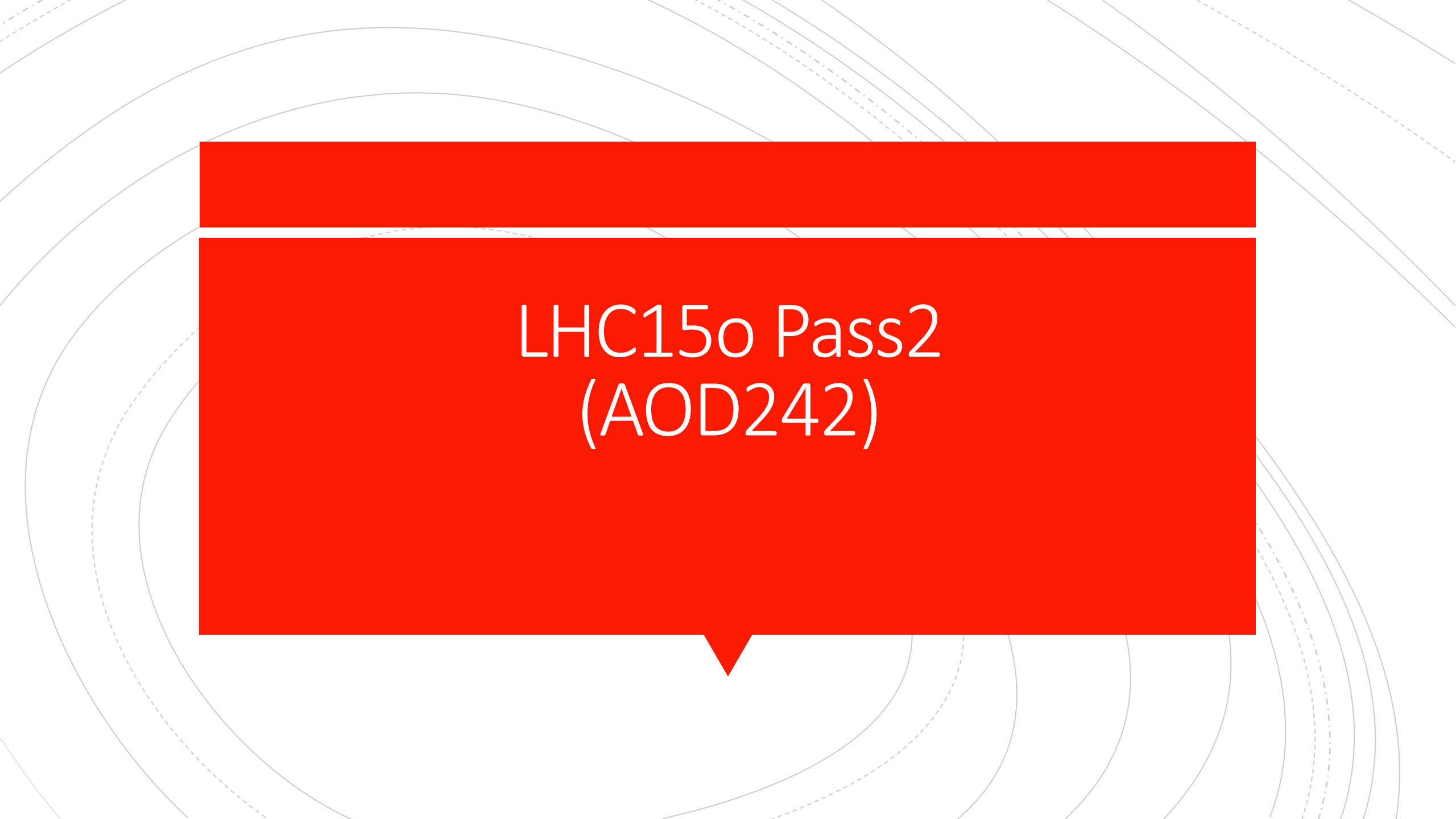
Pass2 include all interaction rate and all the previous fixes, we expect however some improvement (TPC distortion).

$$\frac{\chi^2}{TPC_{Cl}} \text{ cut } 4 \Rightarrow 2,5$$

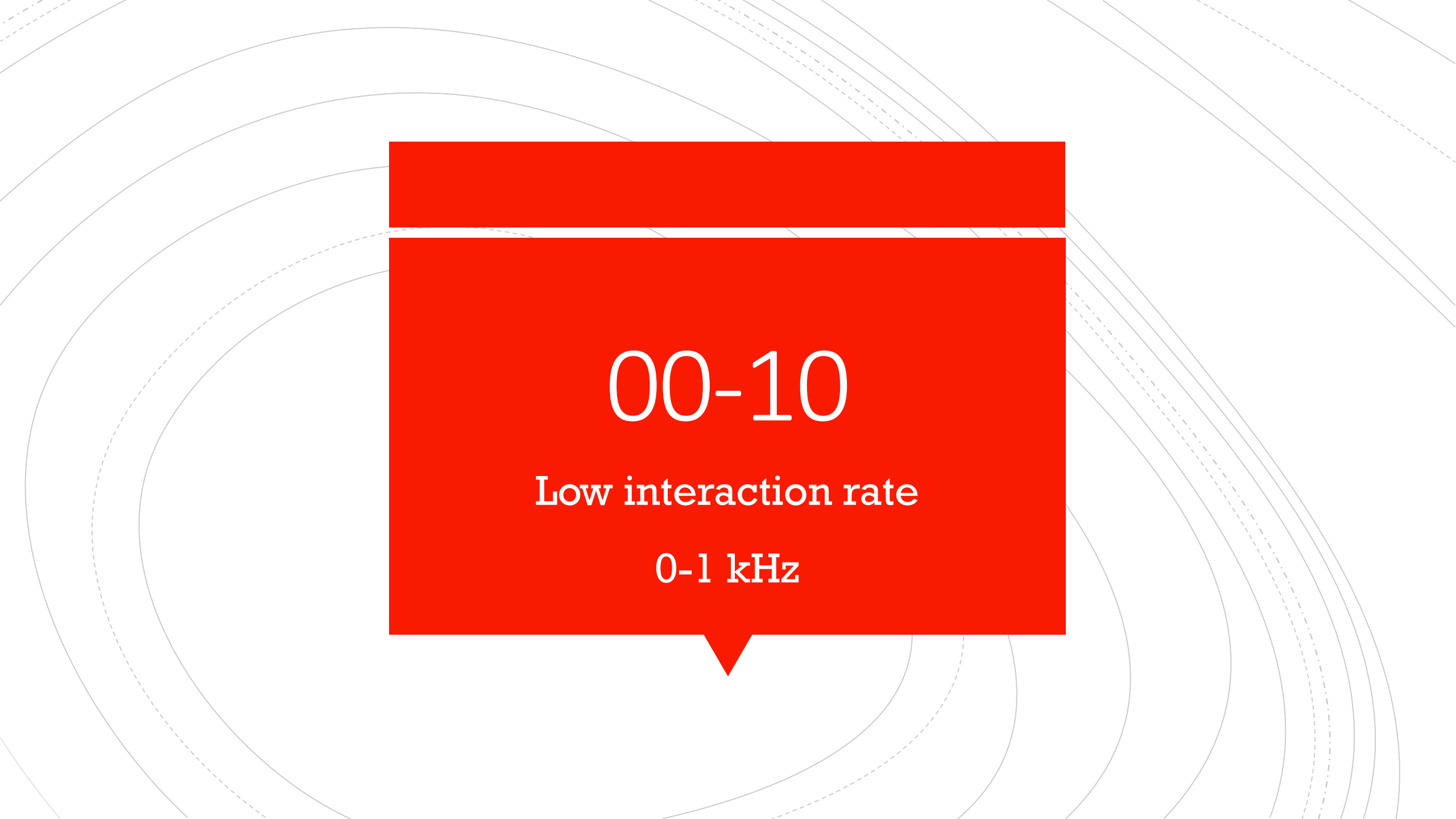
Current work :

Run by run comparison

Understand the differences

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large red speech bubble is centered on the page, pointing downwards.

LHC15o Pass2
(AOD242)

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

00-10

Low interaction rate

0-1 kHz

Global

Eta ratio

Complementary

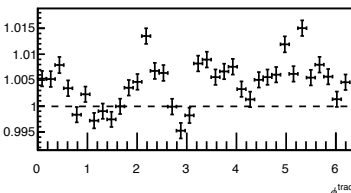
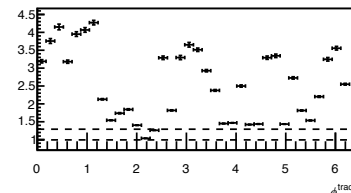
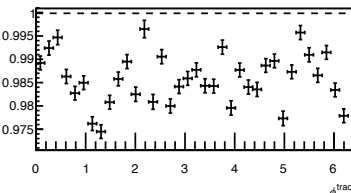
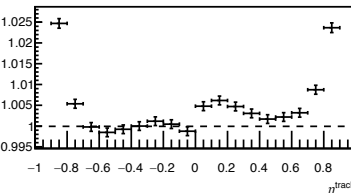
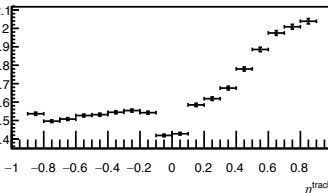
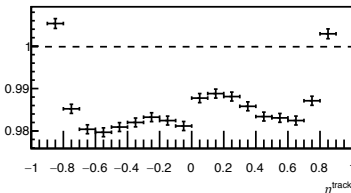
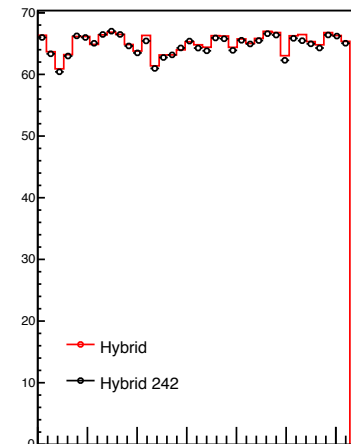
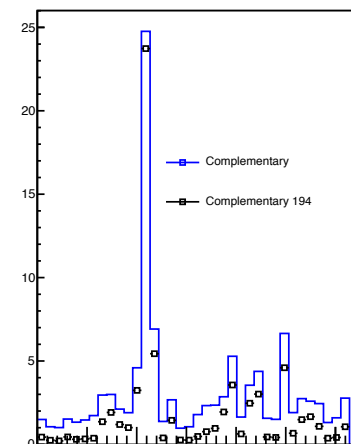
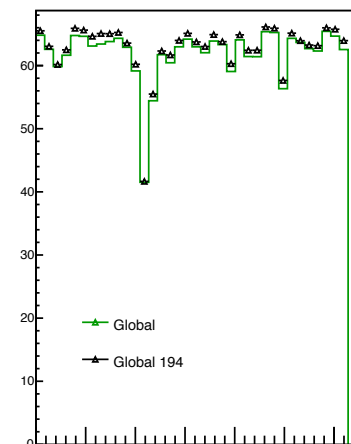
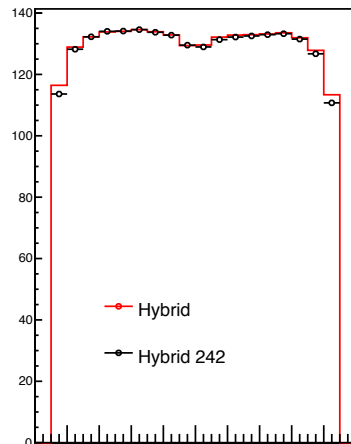
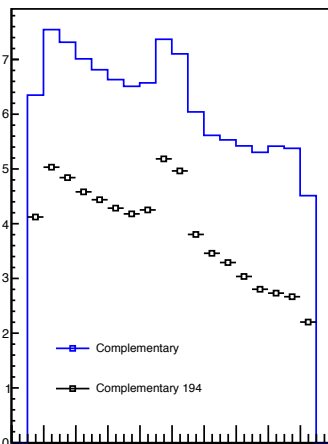
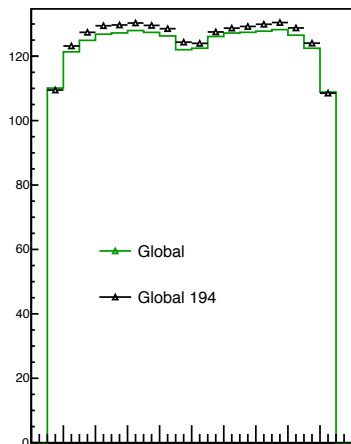
Hybrid

Global

Phi ratio

Complementary

Hybrid



Global

Complementary

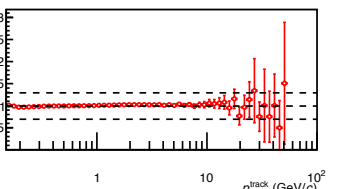
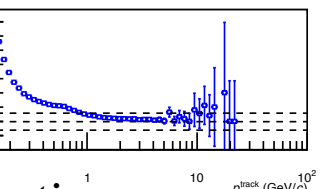
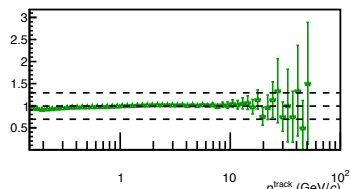
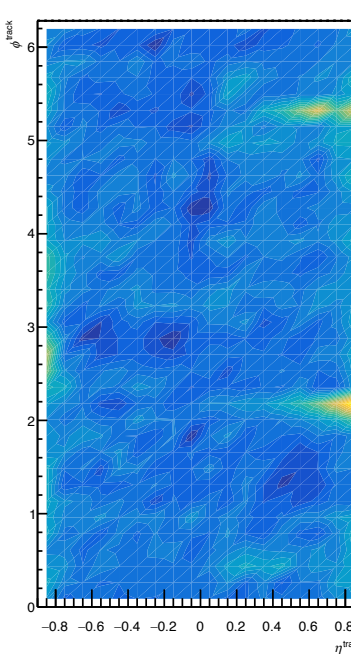
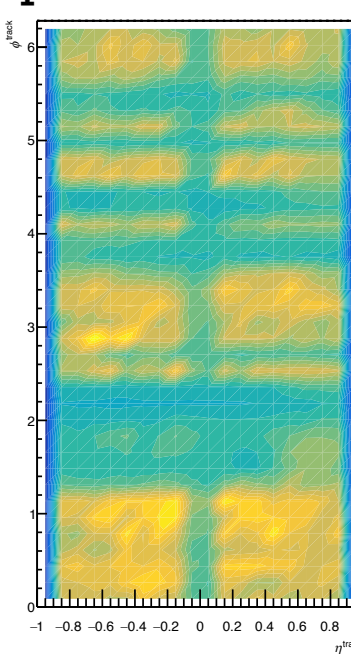
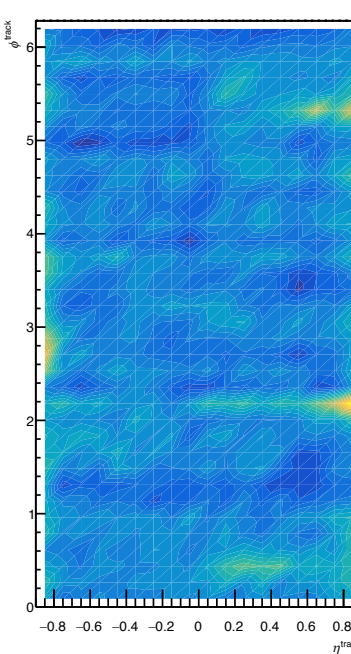
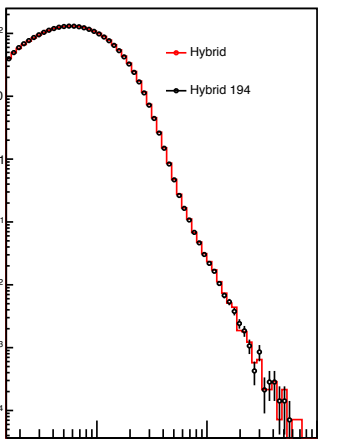
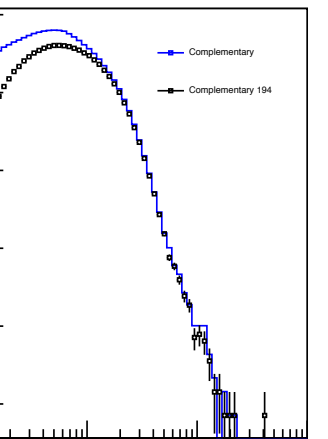
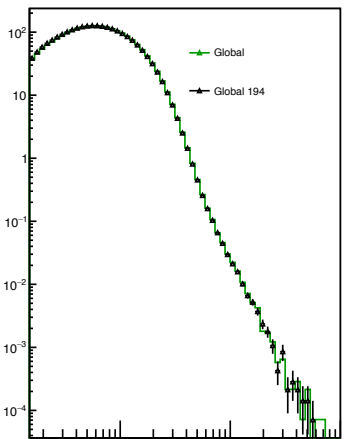
Hybrid

Global

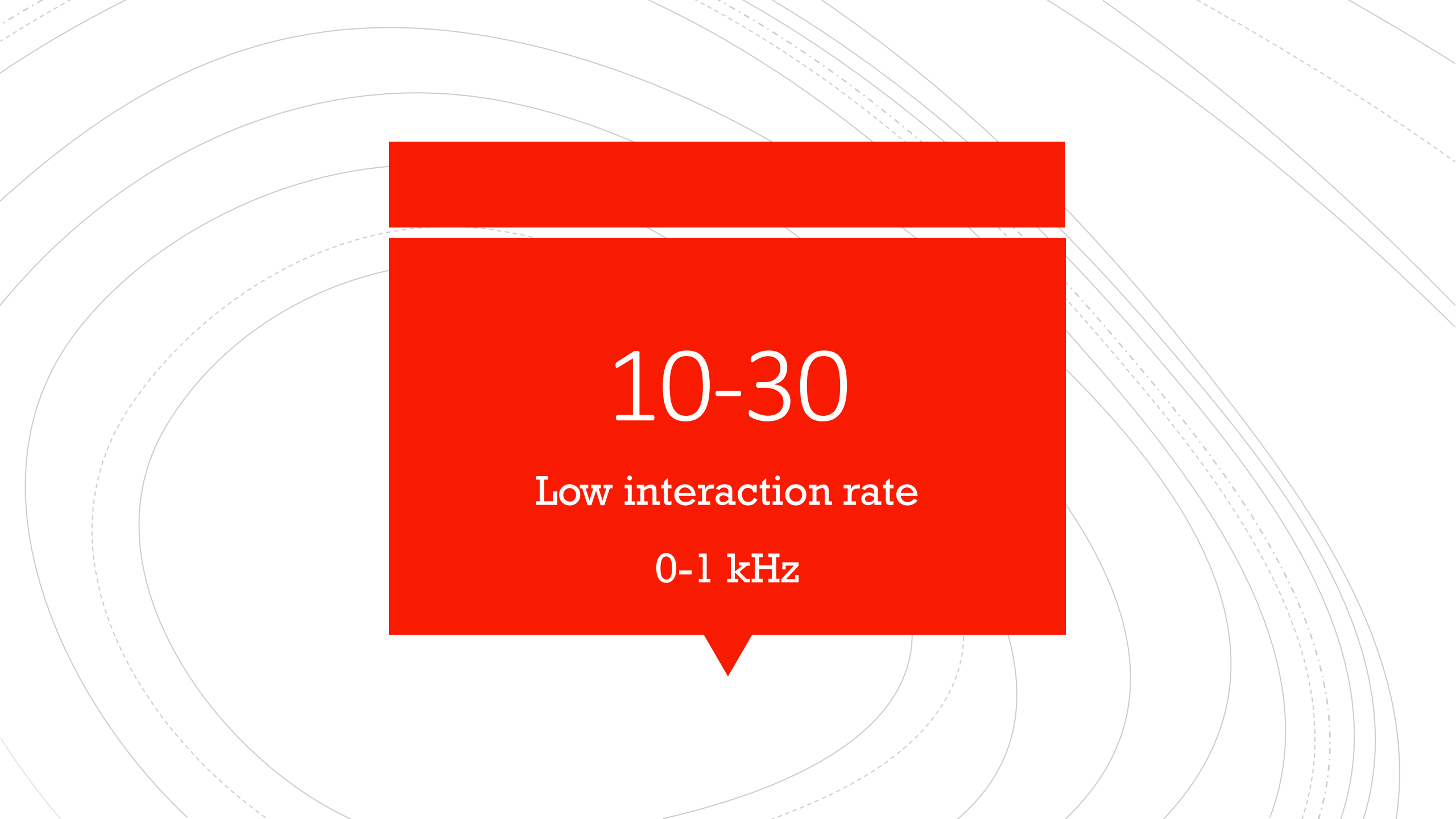
Ratio eta/phi

Complementary

Hybrid



Pt ratio

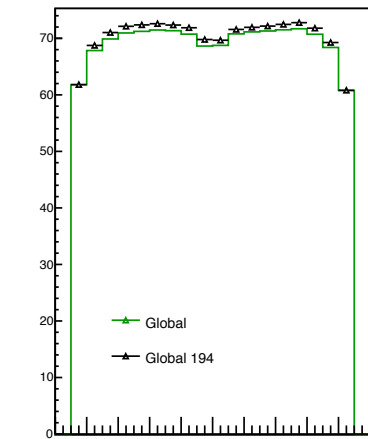
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

10-30

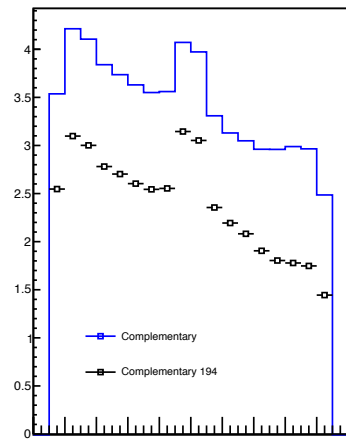
Low interaction rate

0-1 kHz

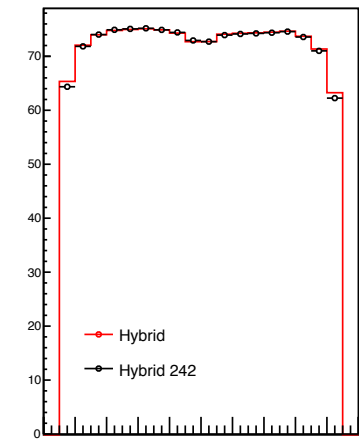
Global



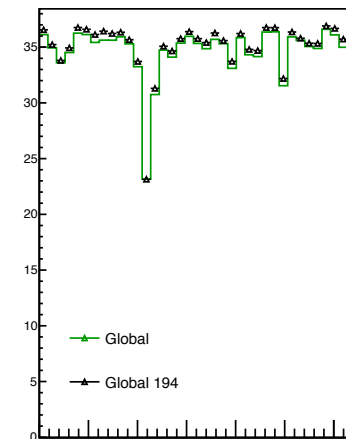
Complementary



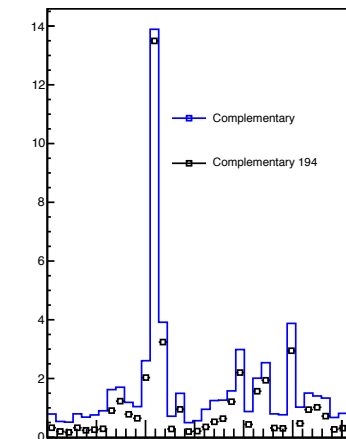
Hybrid



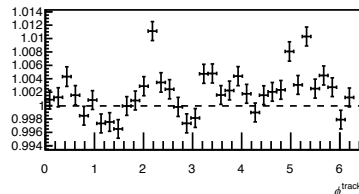
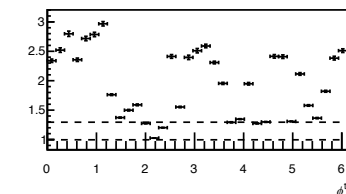
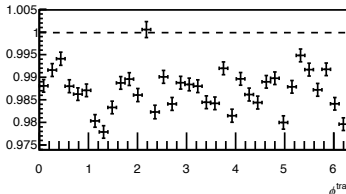
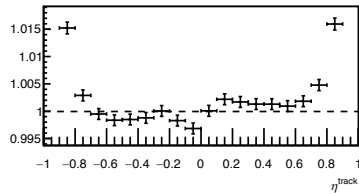
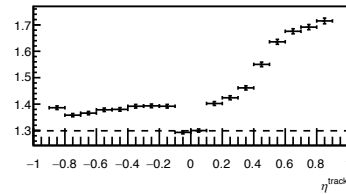
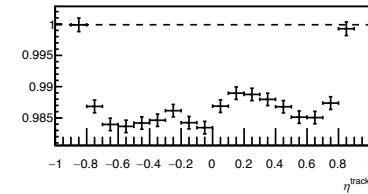
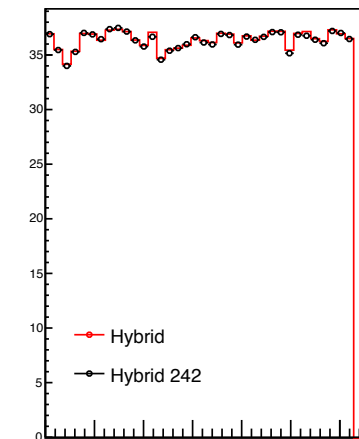
Global



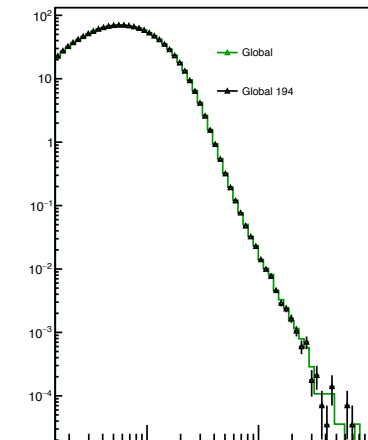
Complementary



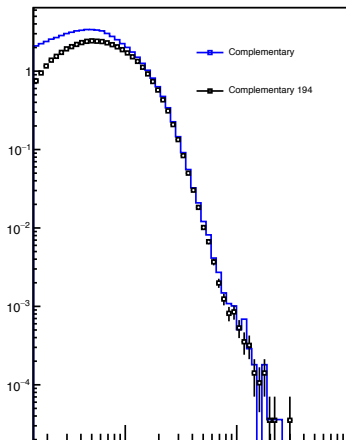
Hybrid



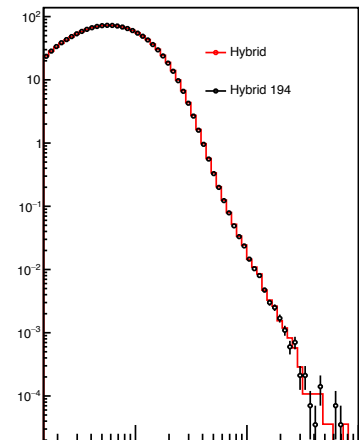
Global



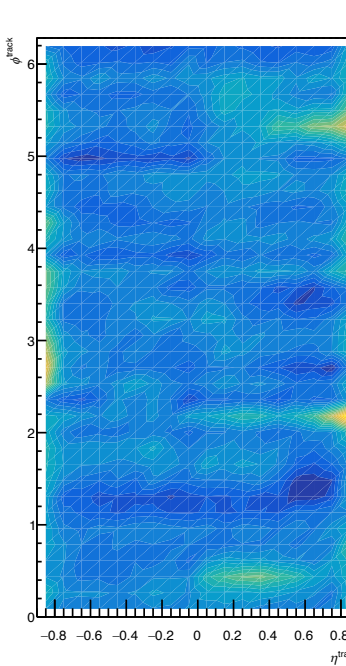
Complementary



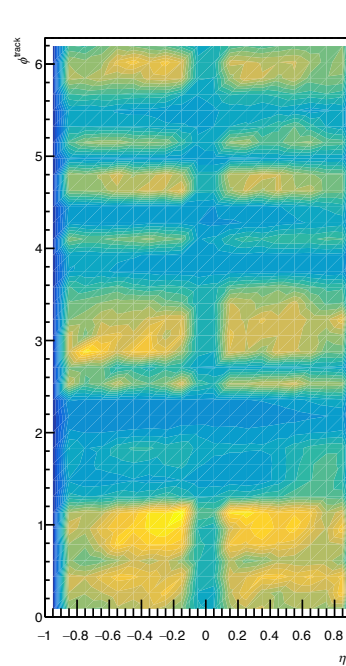
Hybrid



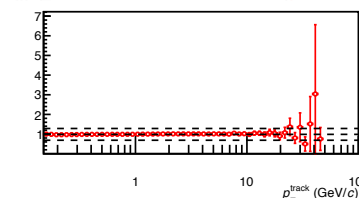
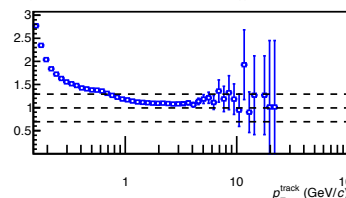
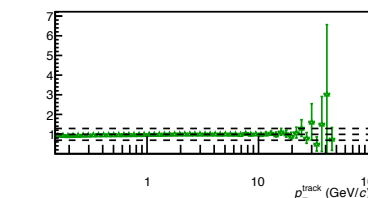
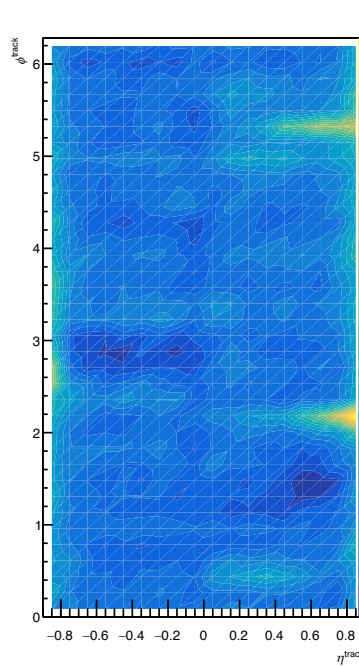
Global

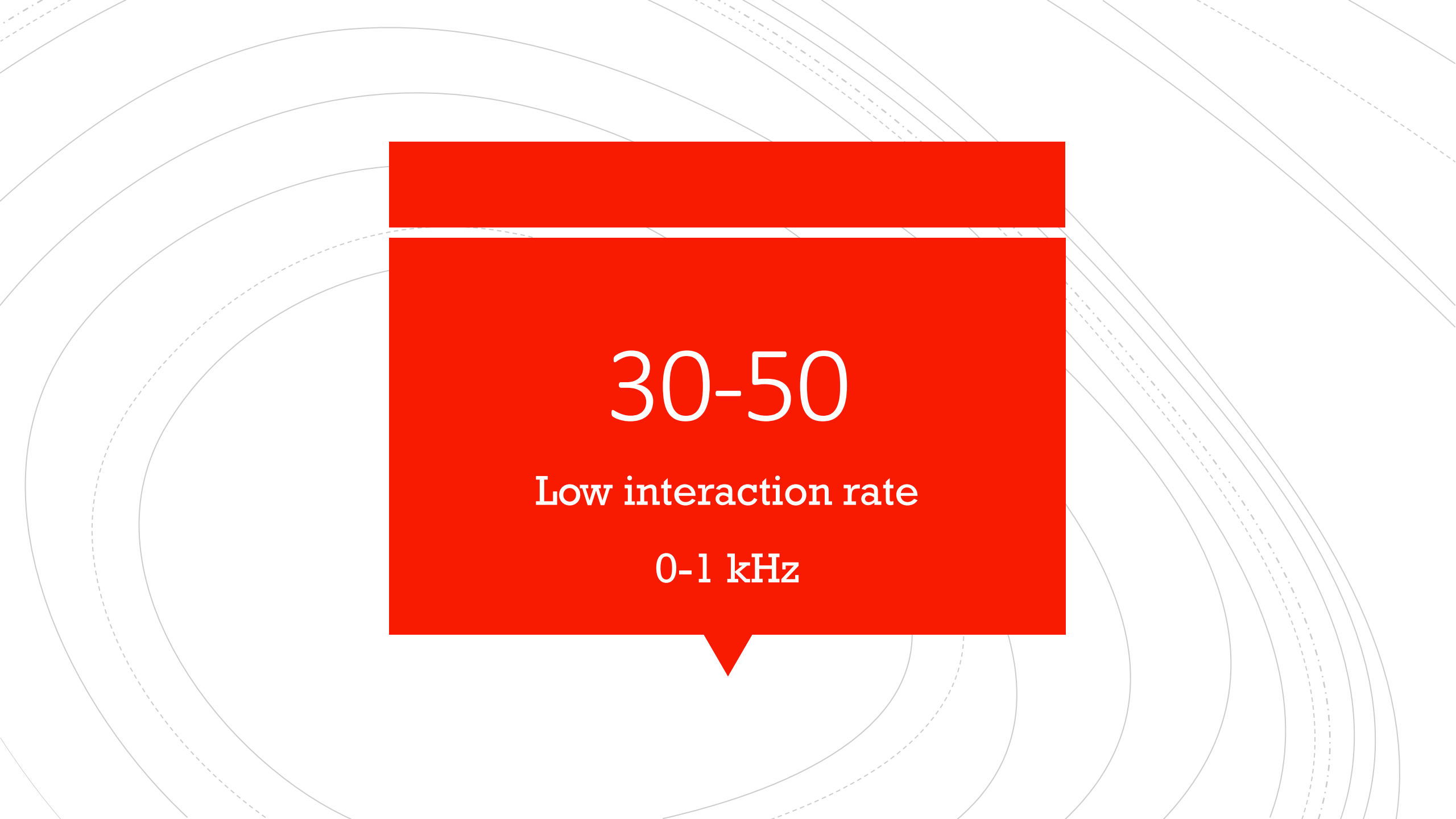


Complementary



Hybrid



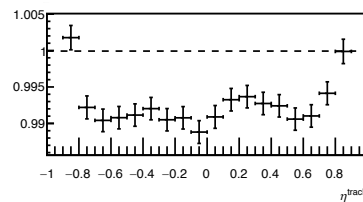
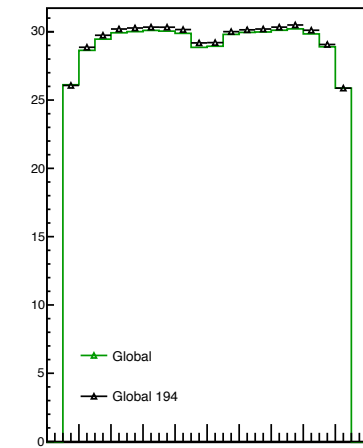
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

30-50

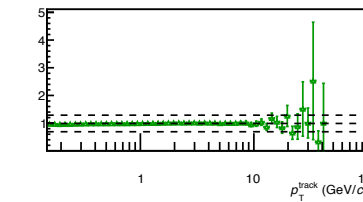
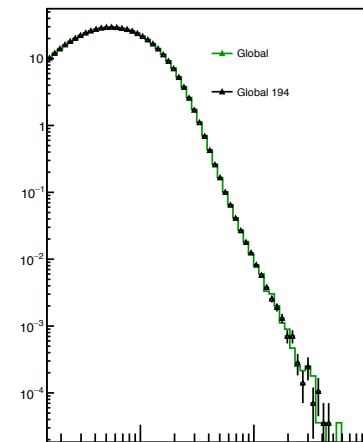
Low interaction rate

0-1 kHz

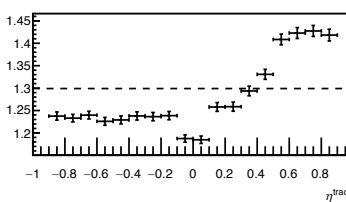
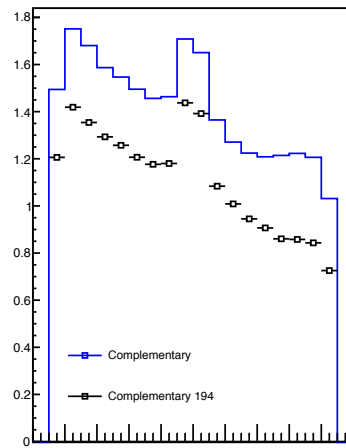
Global



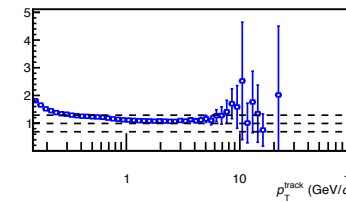
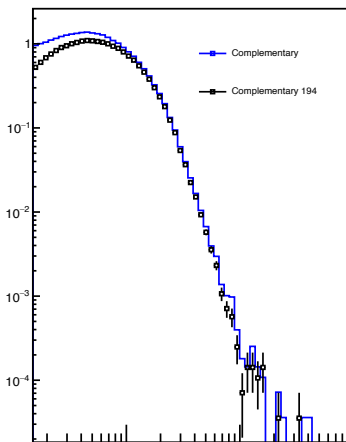
Global



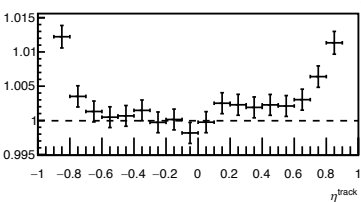
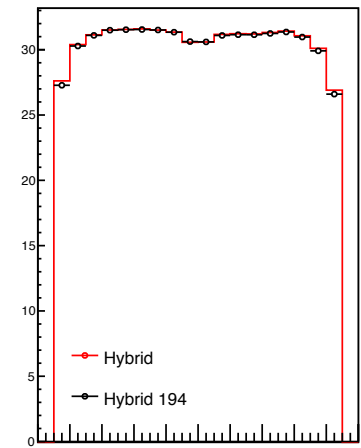
Complementary



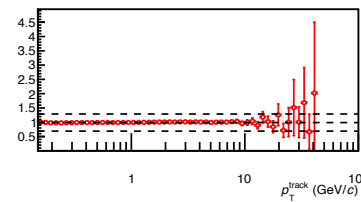
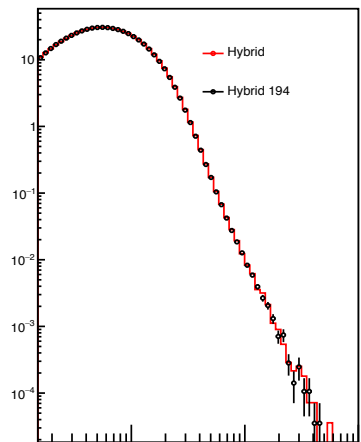
Complementary



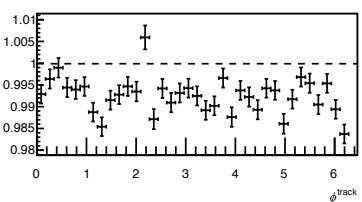
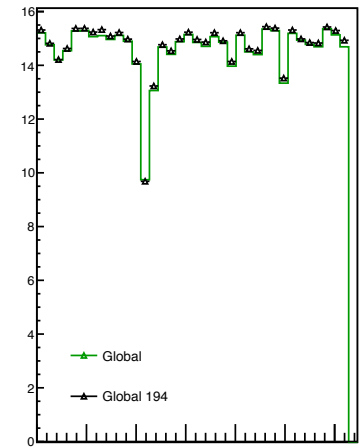
Hybrid



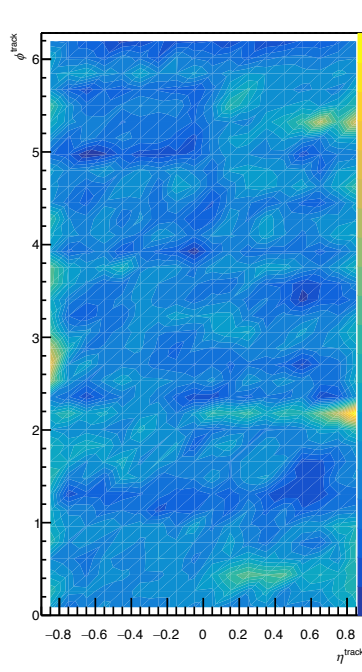
Hybrid



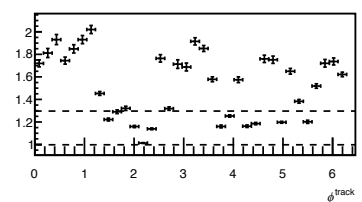
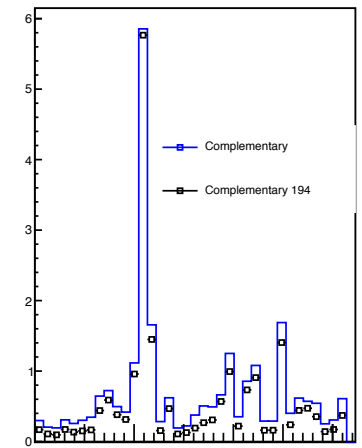
Global



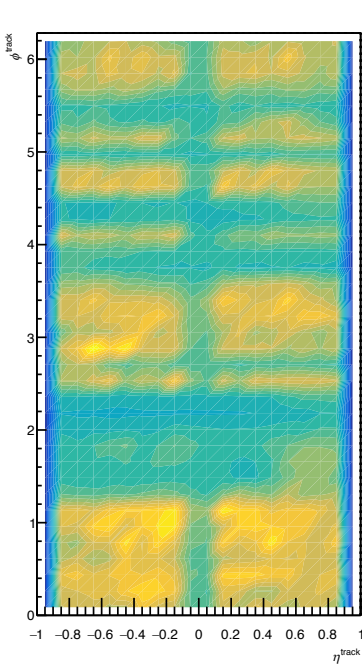
Global



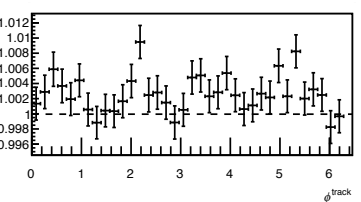
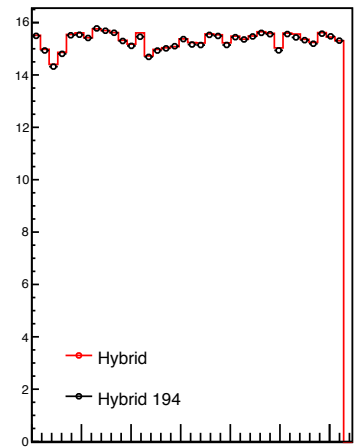
Complementary



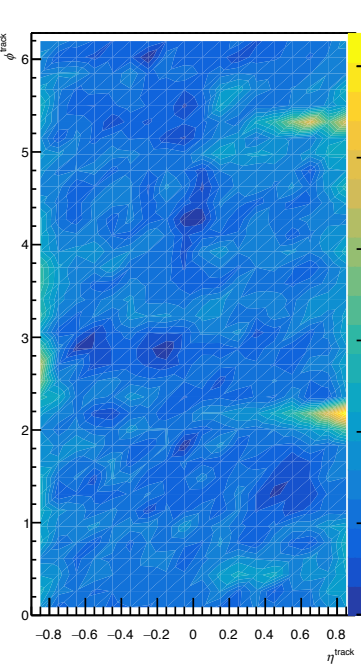
Complementary

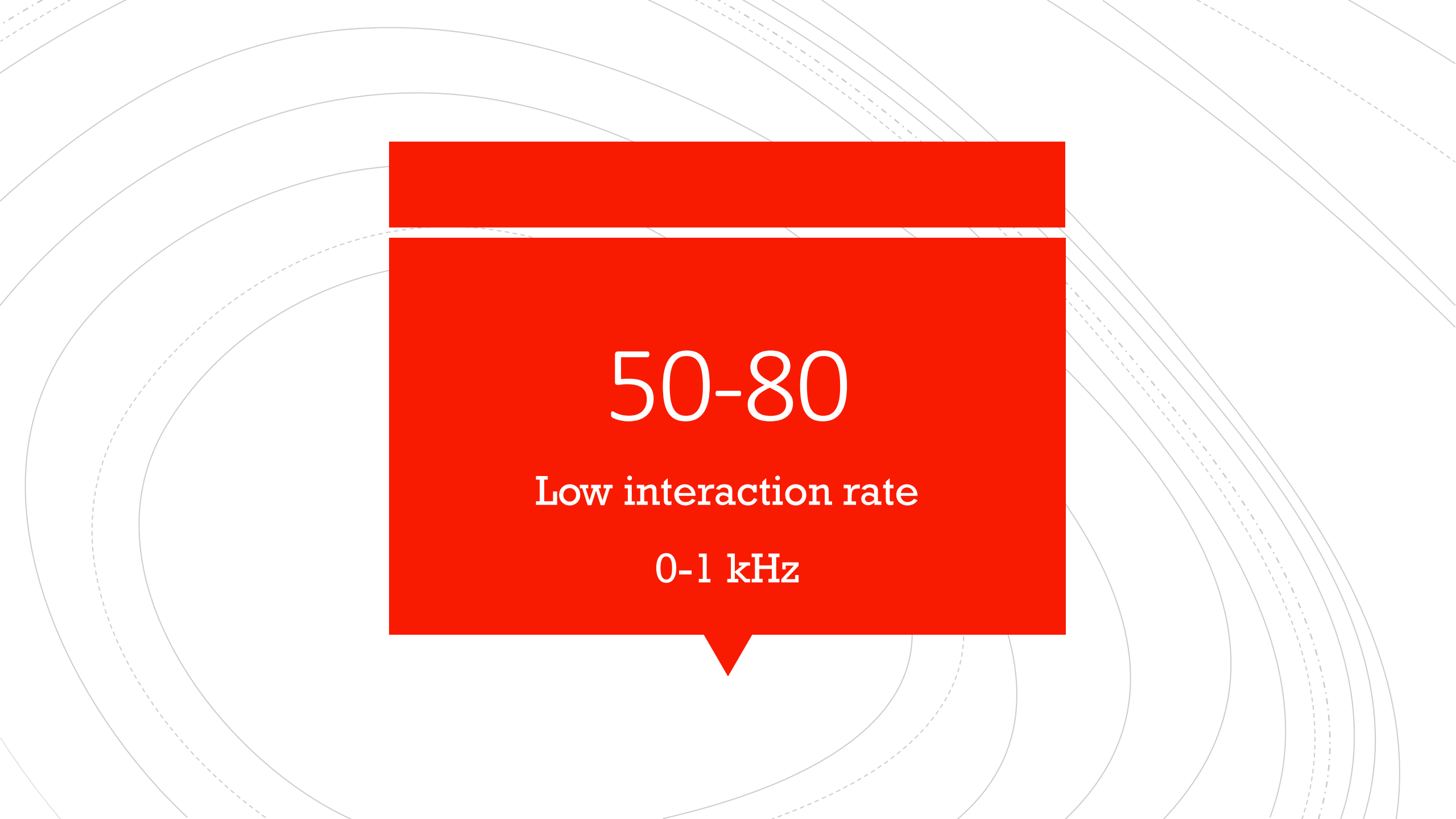


Hybrid



Hybrid

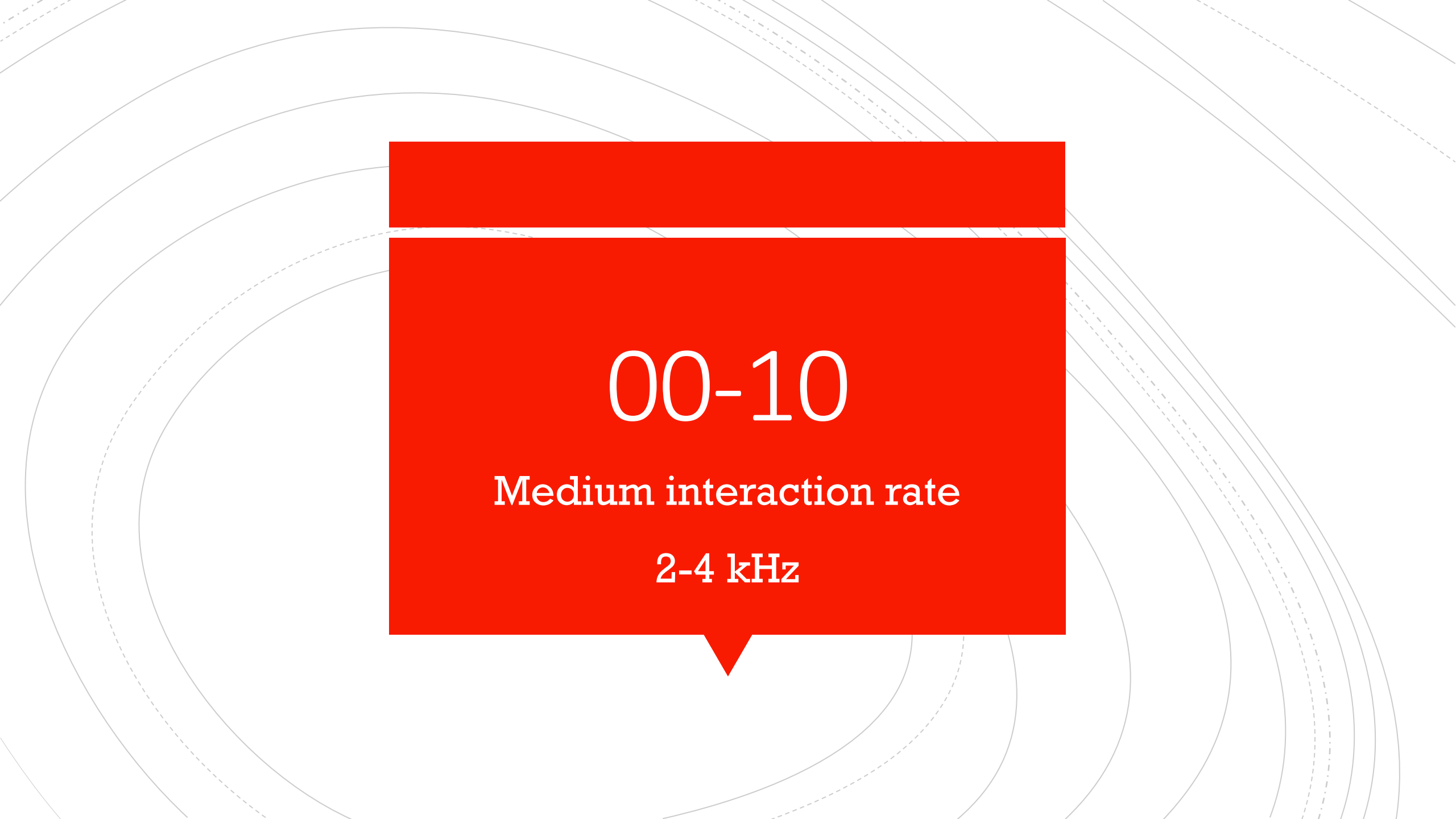


The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

50-80

Low interaction rate

0-1 kHz

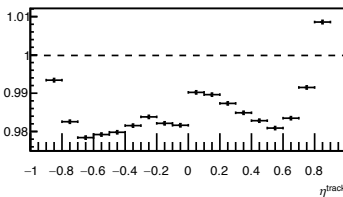
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a pointed bottom is centered on the page.

00-10

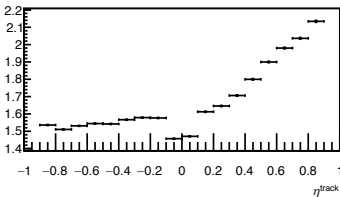
Medium interaction rate

2-4 kHz

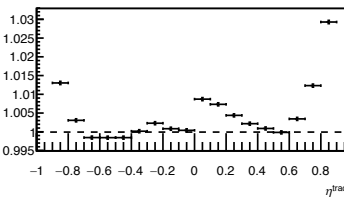
Global



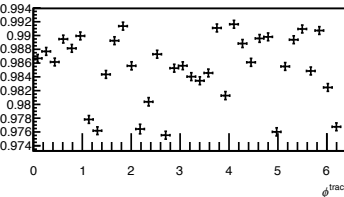
Complementary



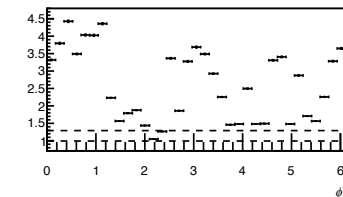
Hybrid



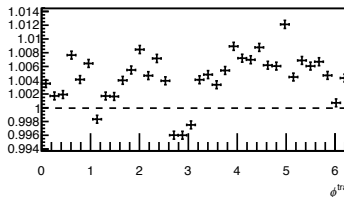
Global



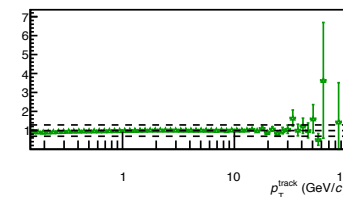
Complementary



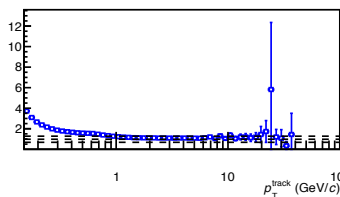
Hybrid



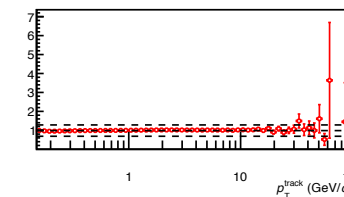
Global



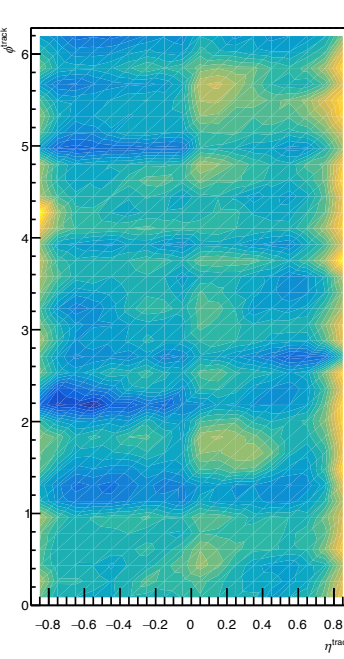
Complementary



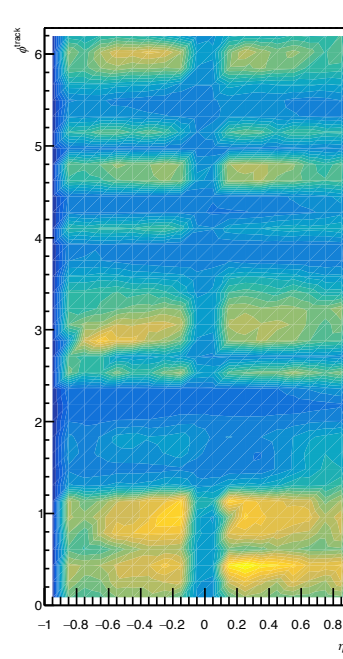
Hybrid



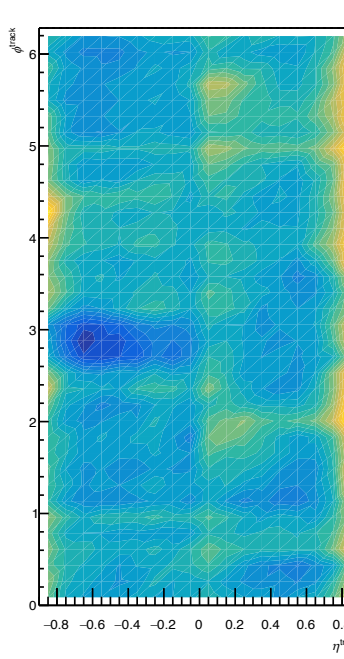
Global

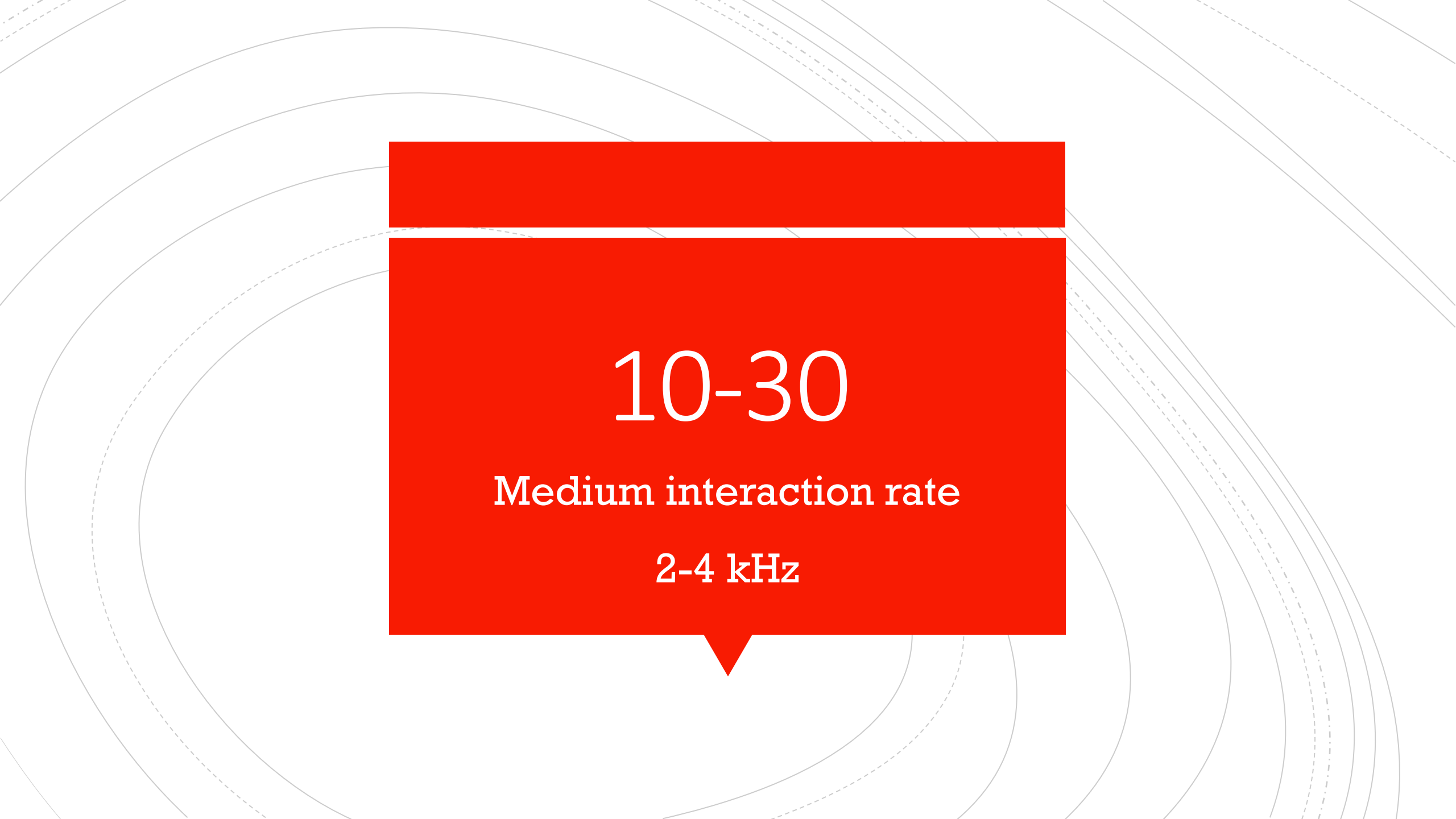


Complementary



Hybrid



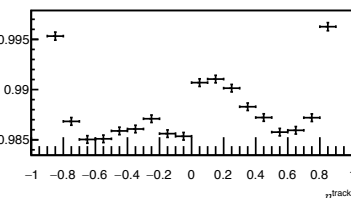
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a pointed bottom is centered on the page.

10-30

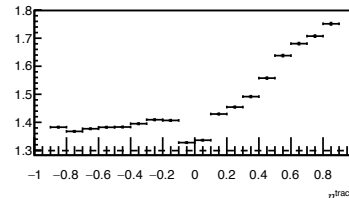
Medium interaction rate

2-4 kHz

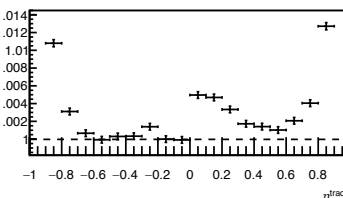
Global



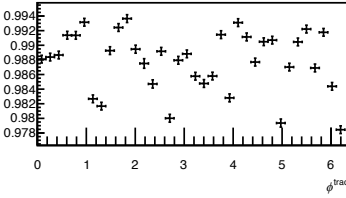
Complementary



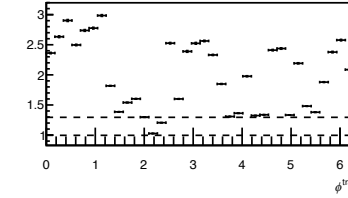
Hybri



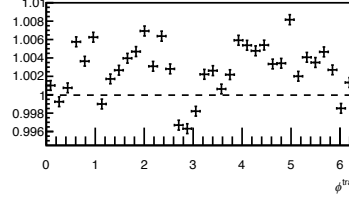
Global



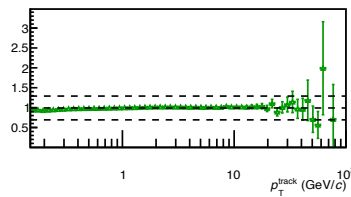
Complementar



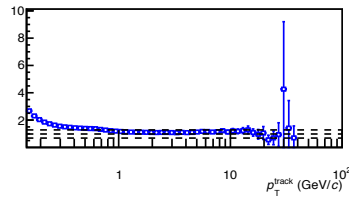
Hybrid



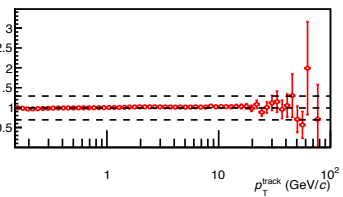
Global



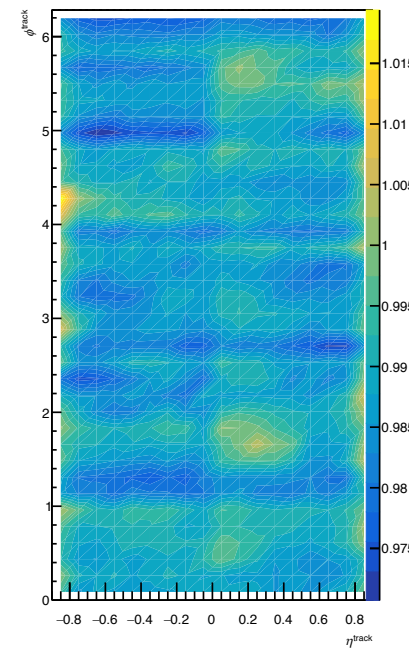
Complementary



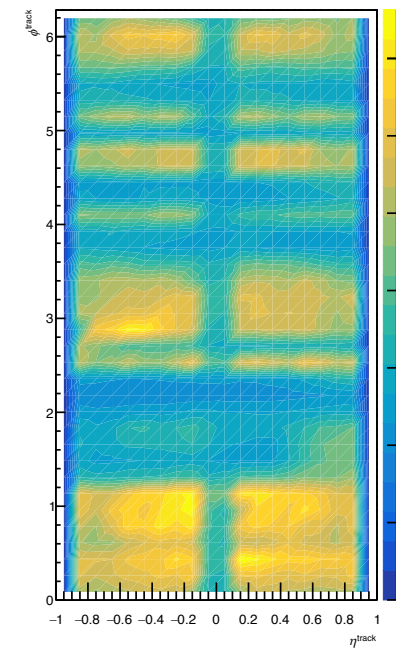
Hybrid



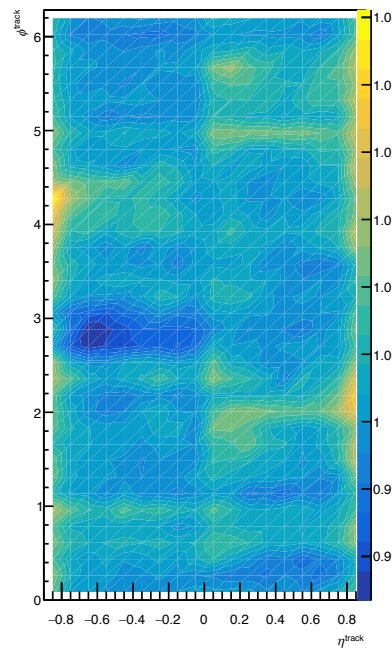
Global

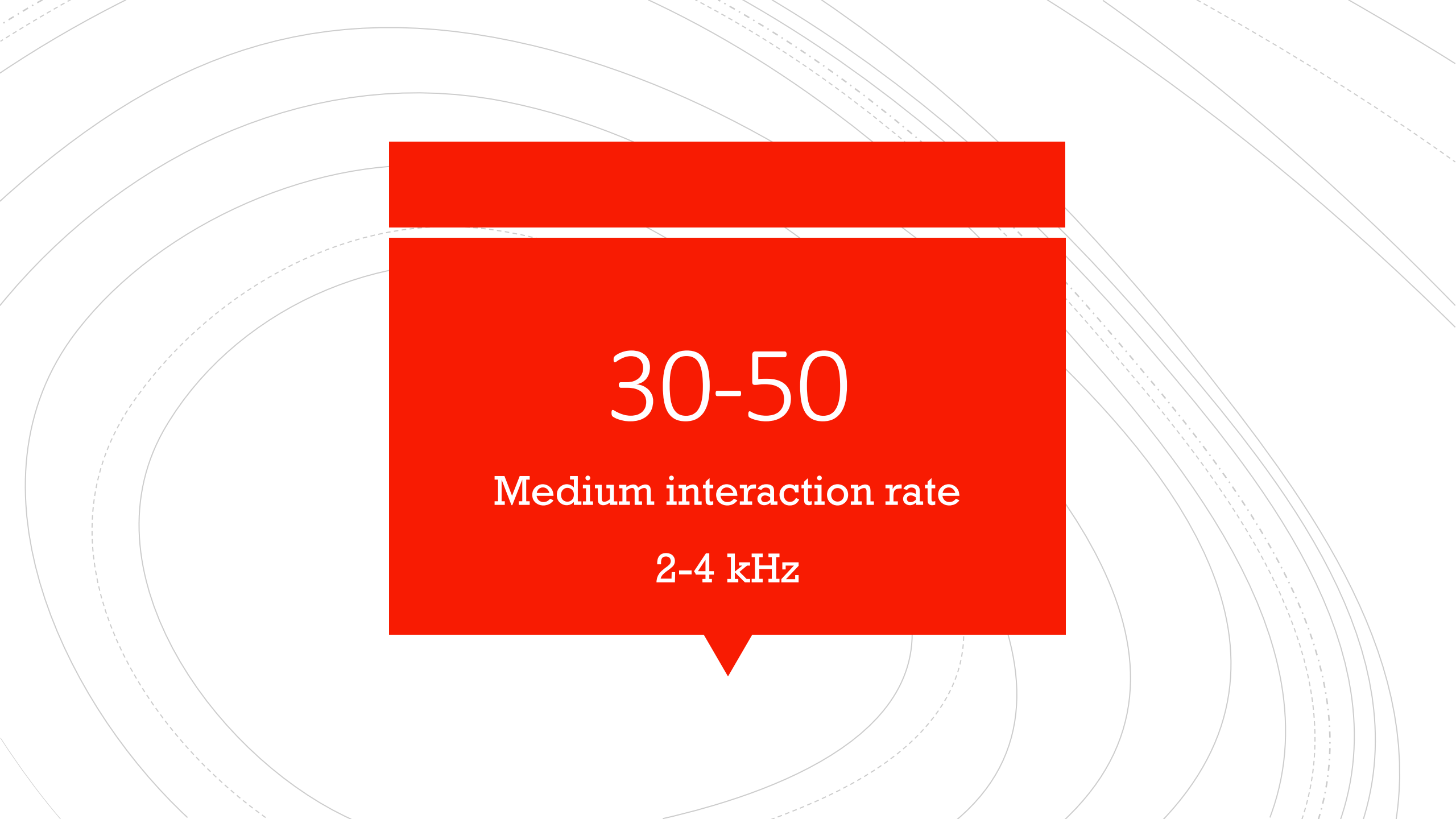


Complementary



Hybrid

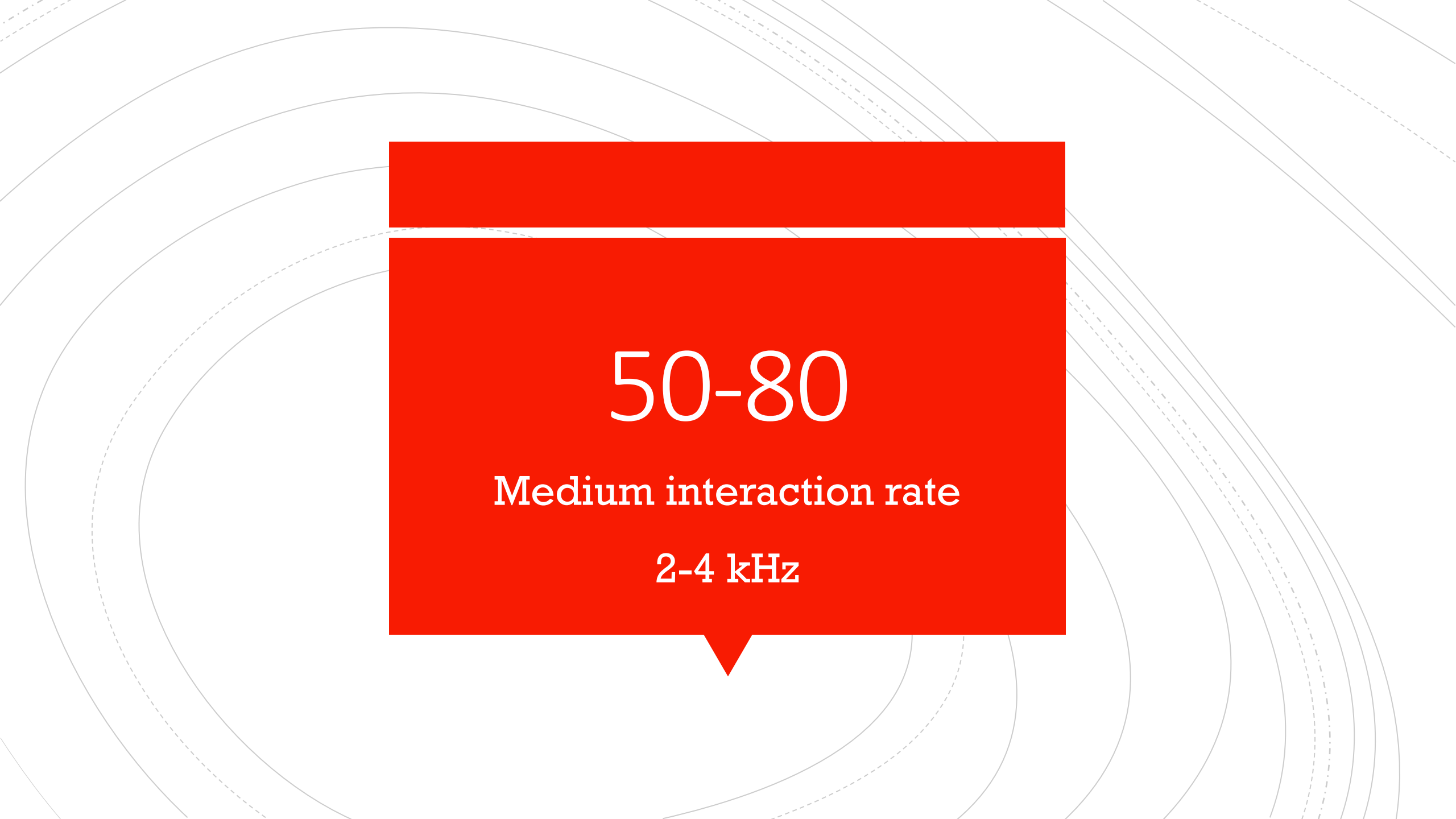


The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

30-50

Medium interaction rate

2-4 kHz

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A bright red callout box is centered on the page, containing white text. The box has a rectangular body and a triangular pointer at the bottom.

50-80

Medium interaction rate

2-4 kHz

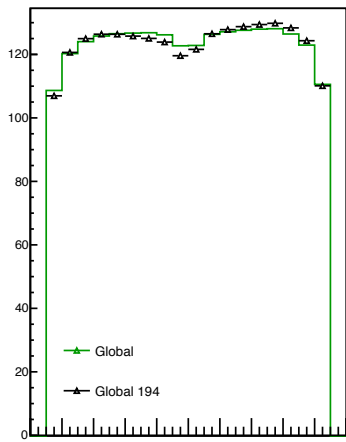
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

00-10

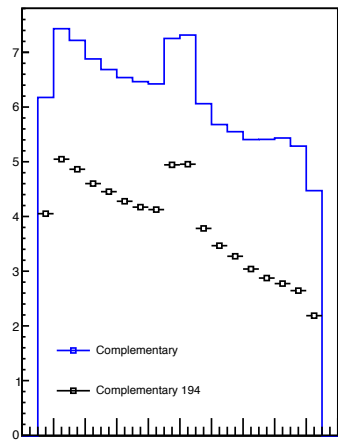
High interaction rate

> 5.5 kHz

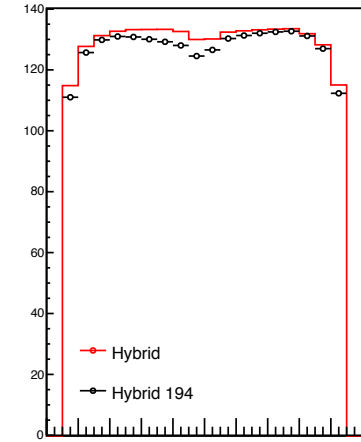
Global



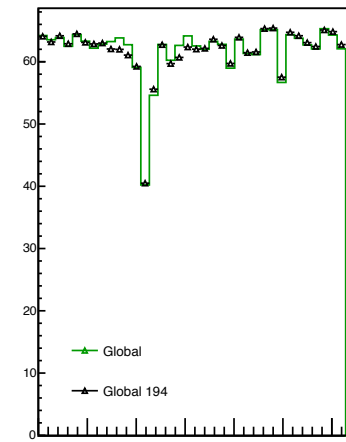
Complementary



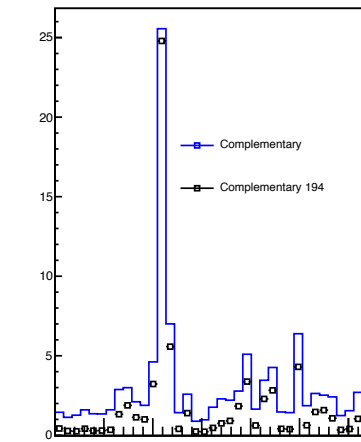
Hybrid



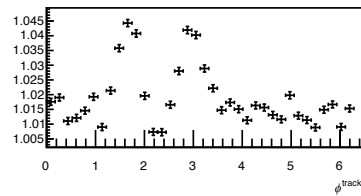
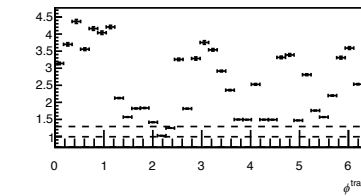
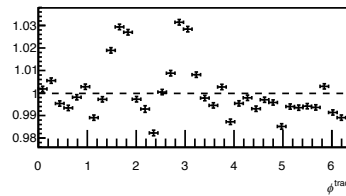
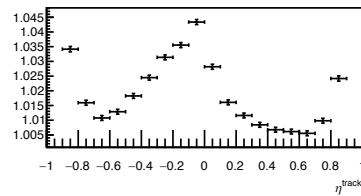
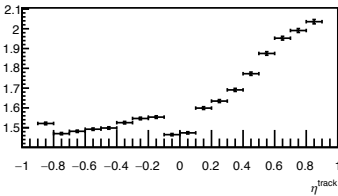
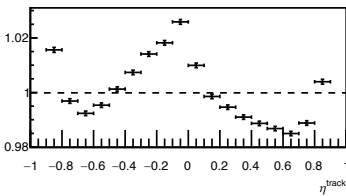
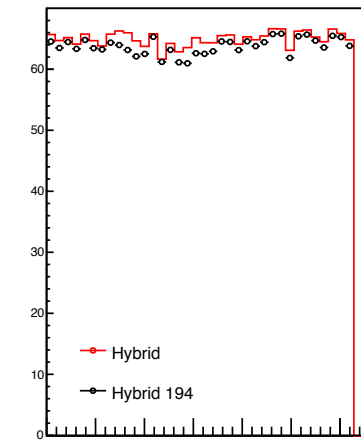
Global



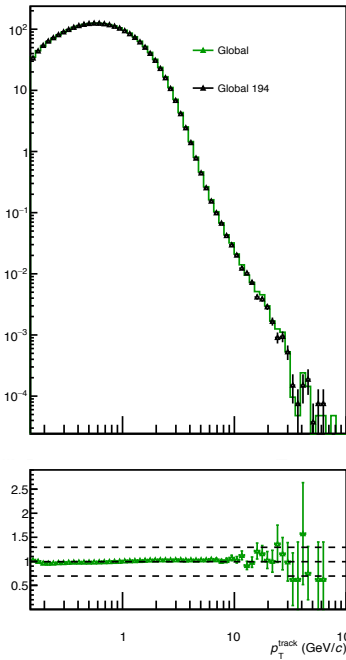
Complementary



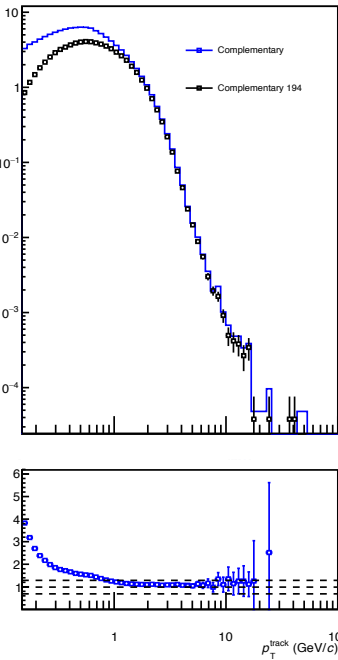
Hybrid



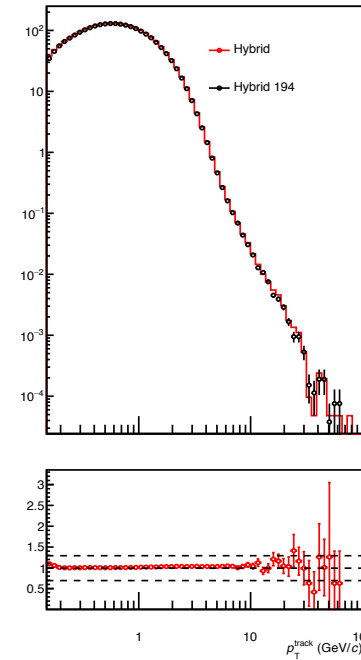
Global



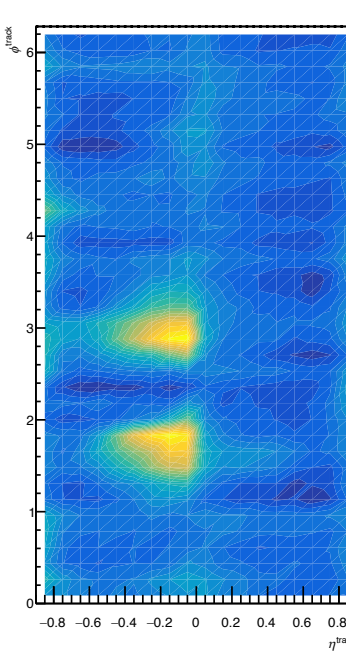
Complementary



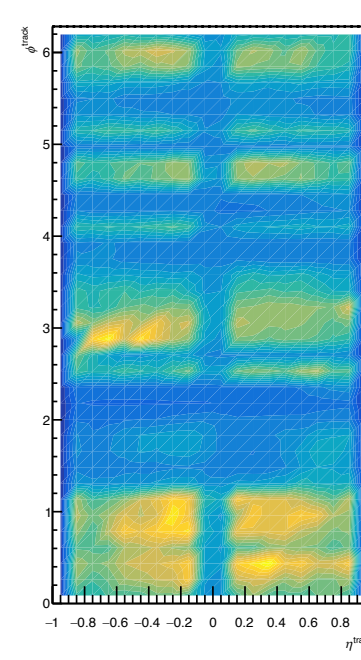
Hybrid



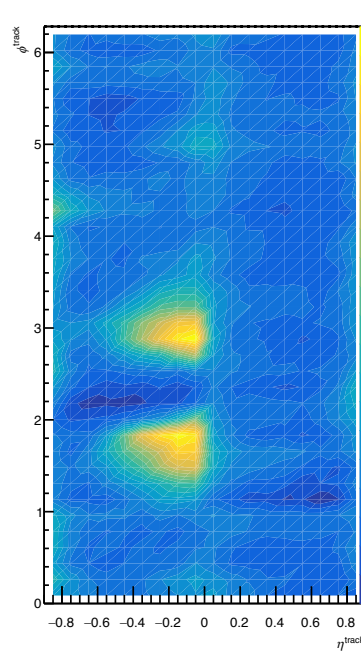
Global



Complementary



Hybrid



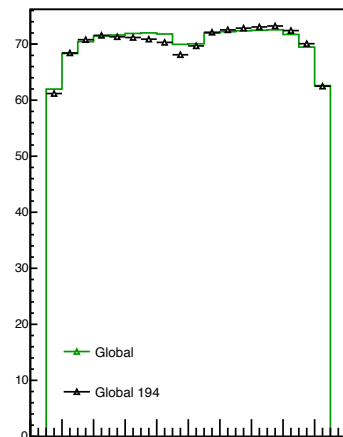
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

10-30

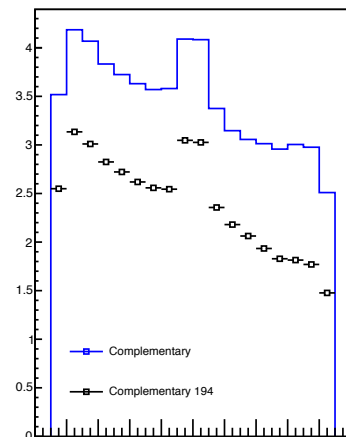
High interaction rate

> 5.5 kHz

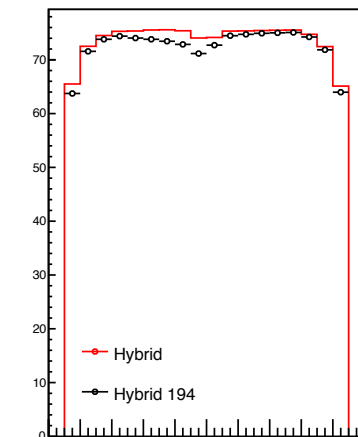
Global



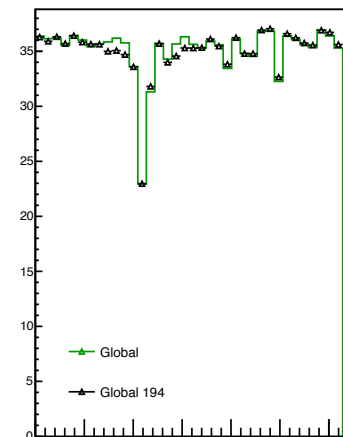
Complementary



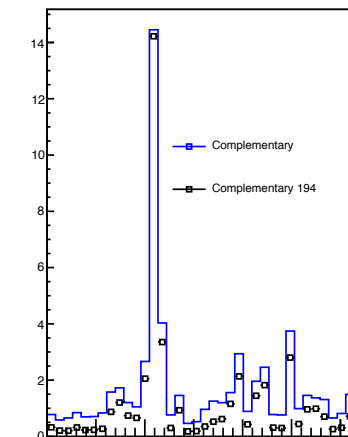
Hybrid



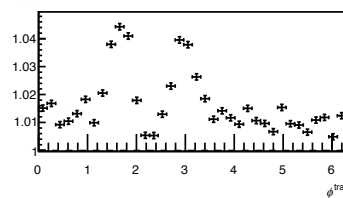
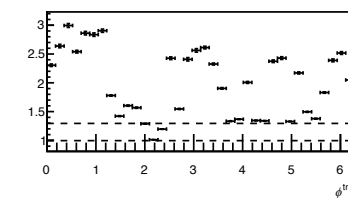
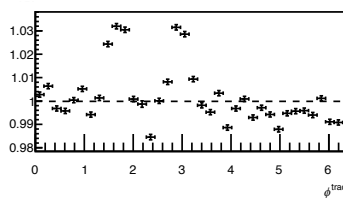
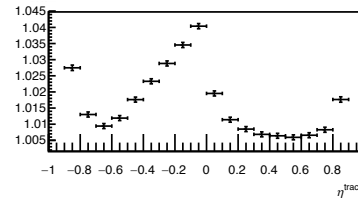
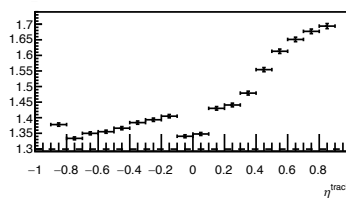
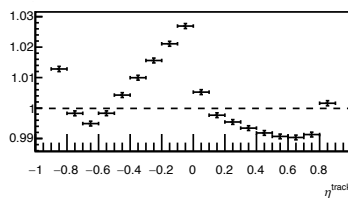
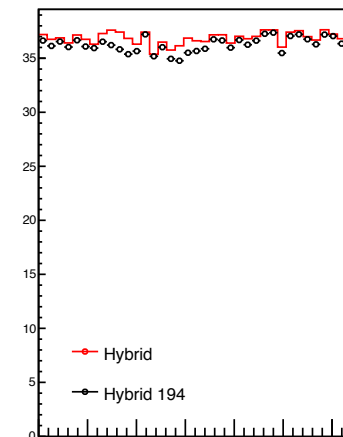
Global



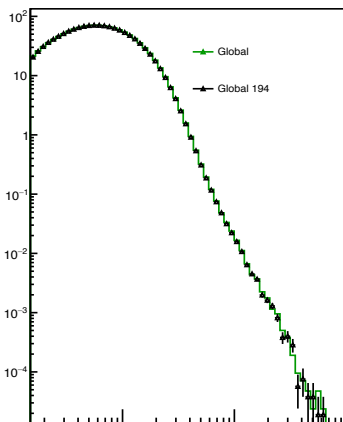
Complementary



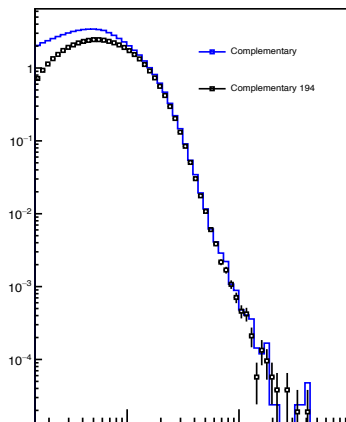
Hybrid



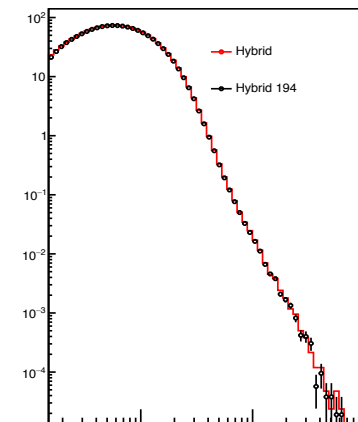
Global



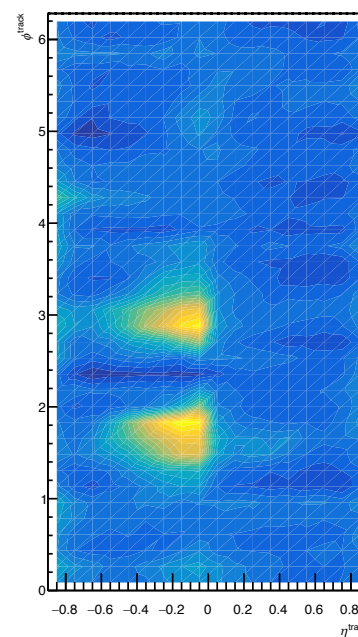
Complementary



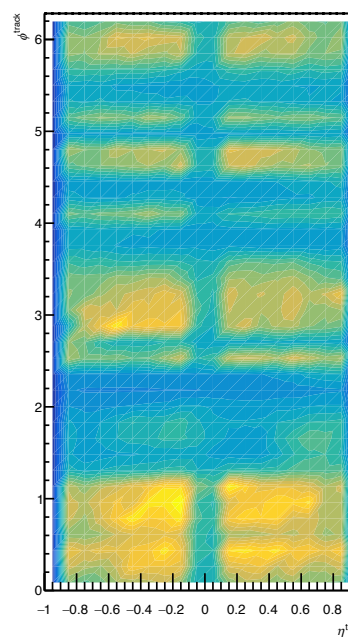
Hybrid



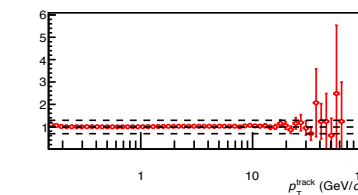
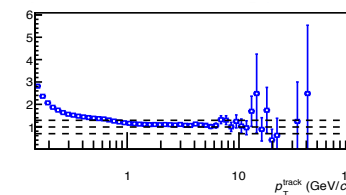
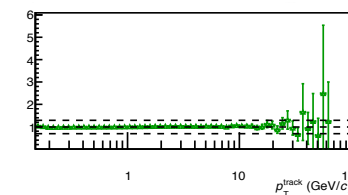
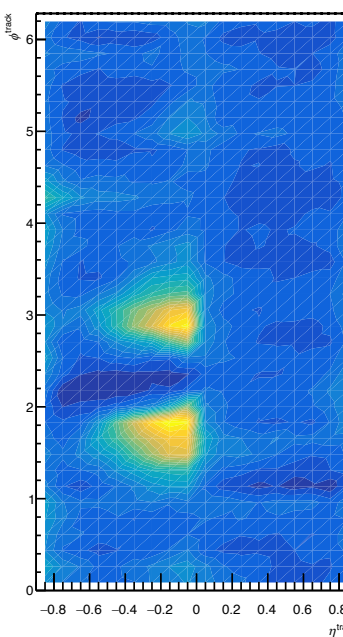
Global

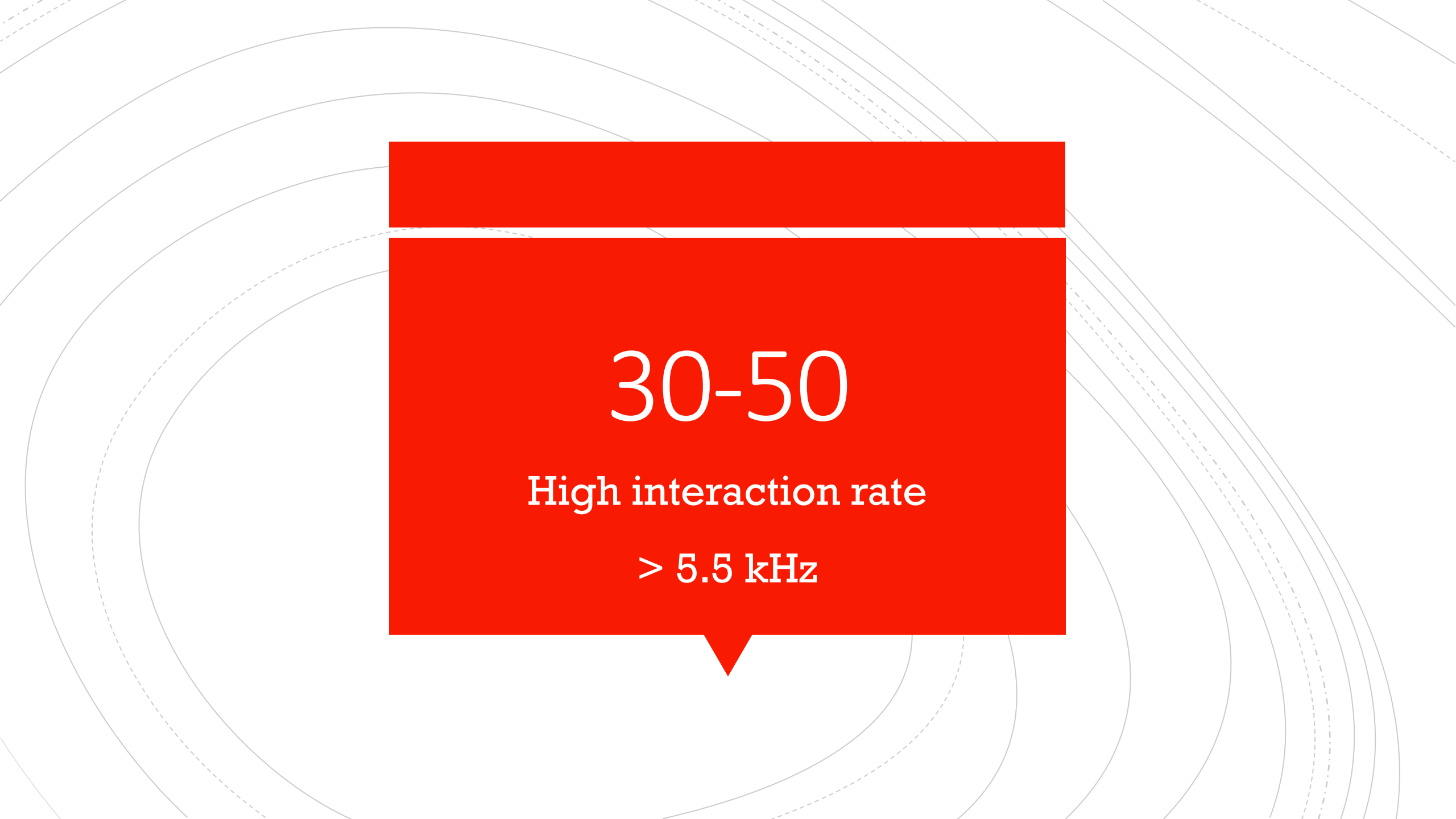


Complementary



Hybrid



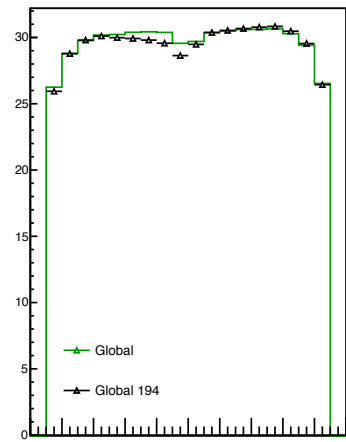
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

30-50

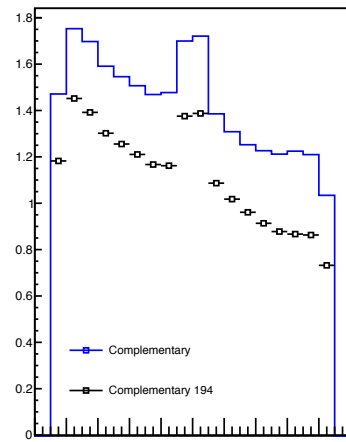
High interaction rate

> 5.5 kHz

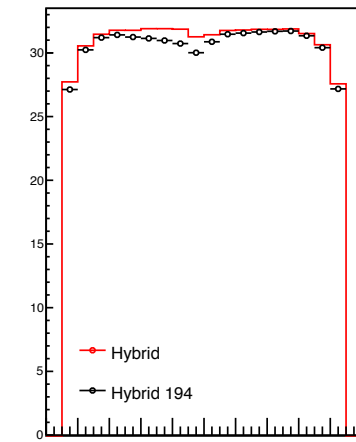
Global



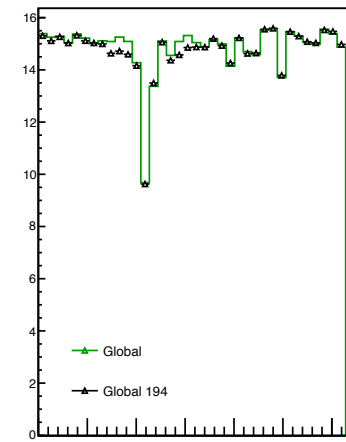
Complementary



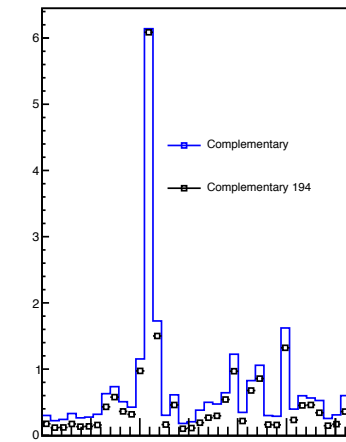
Hybrid



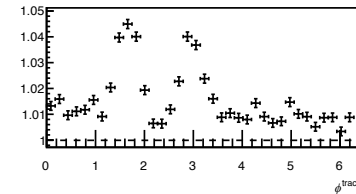
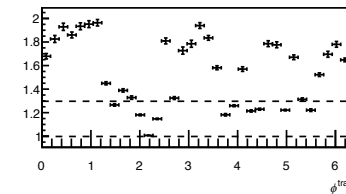
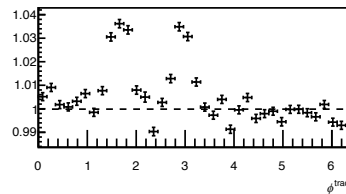
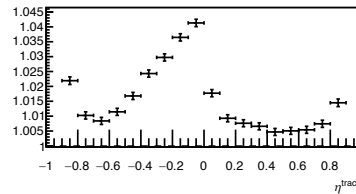
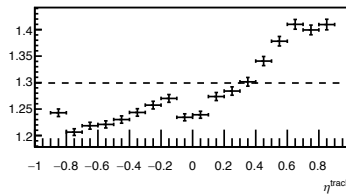
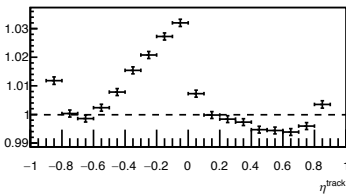
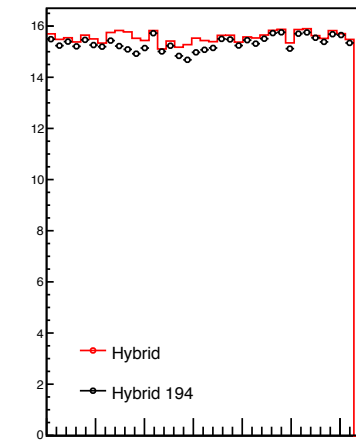
Global



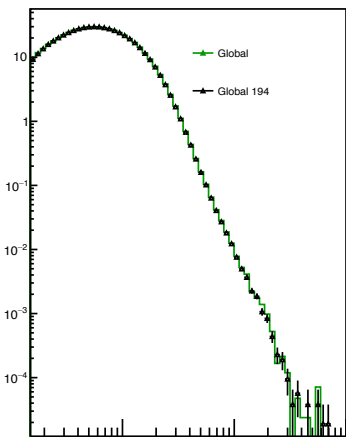
Complementary



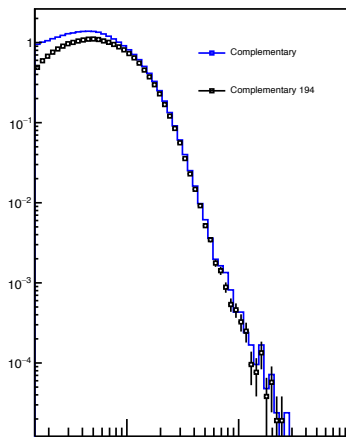
Hybrid



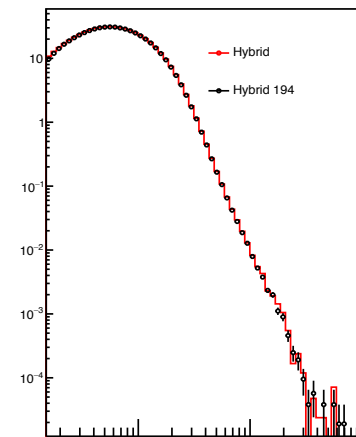
Global



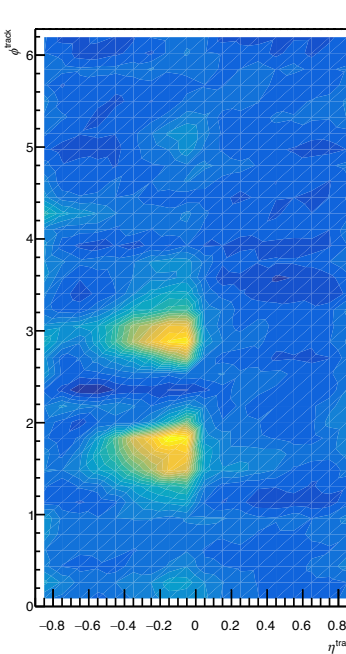
Complementary



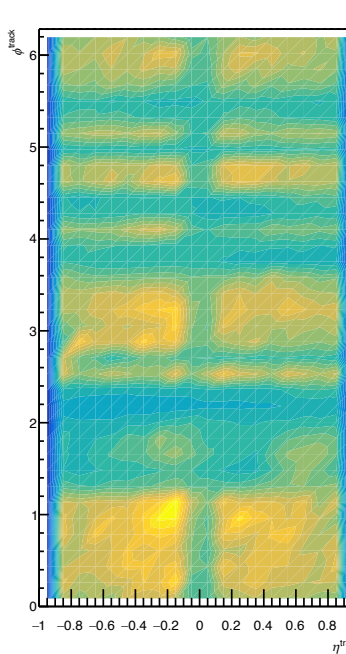
Hybrid



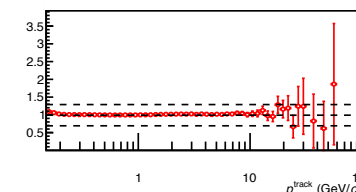
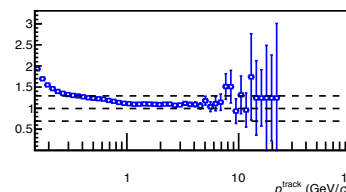
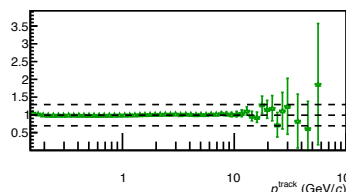
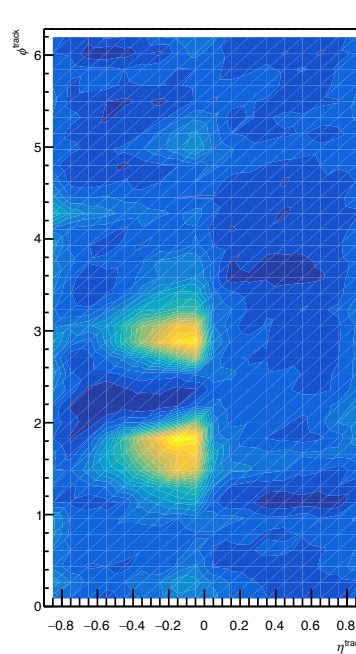
Global

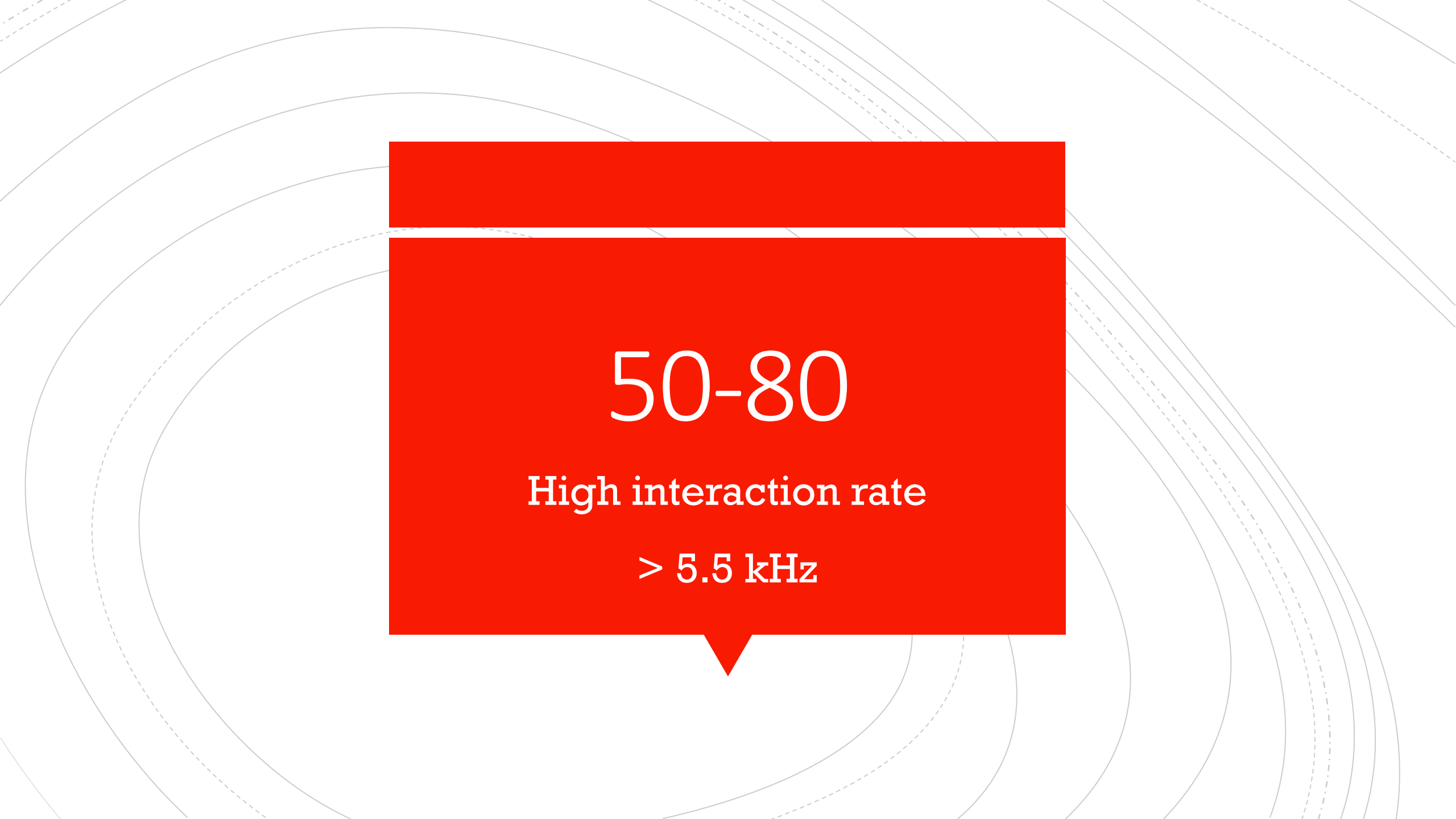


Complementary



Hybrid

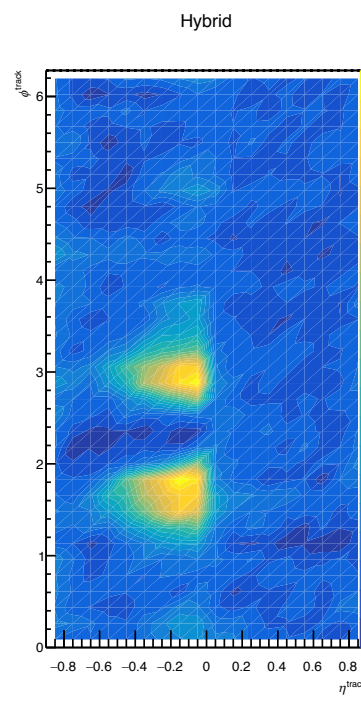
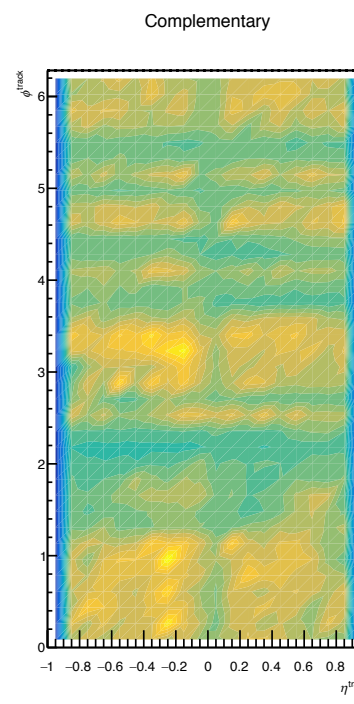
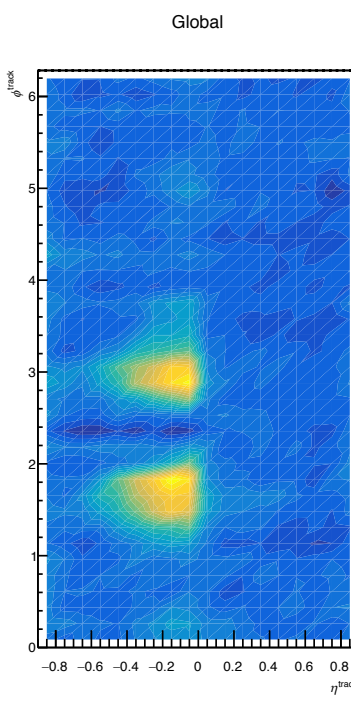
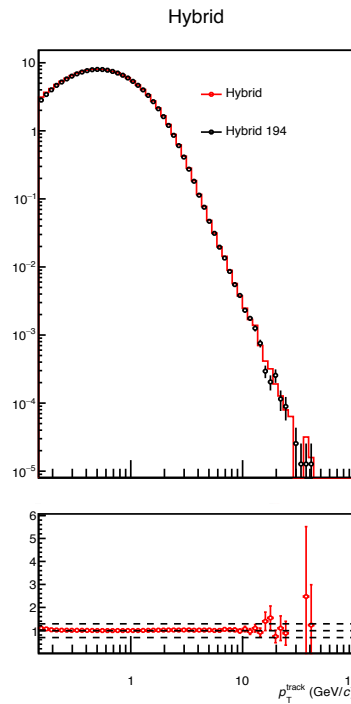
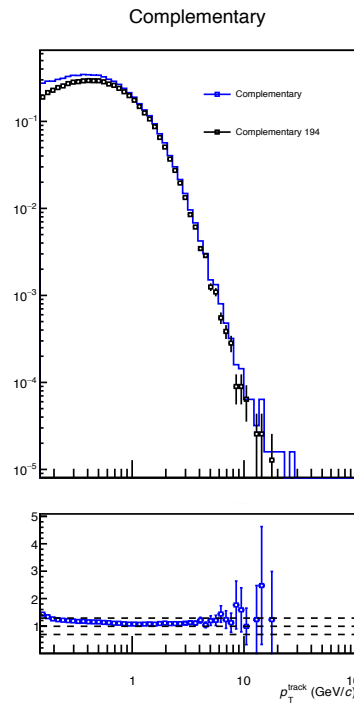
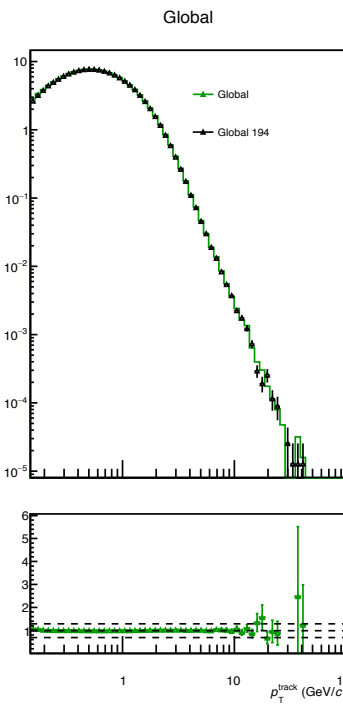
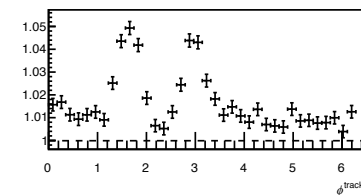
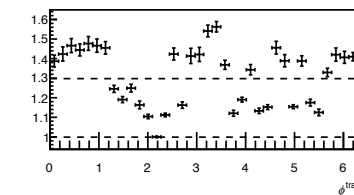
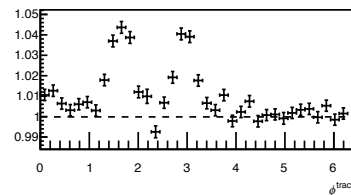
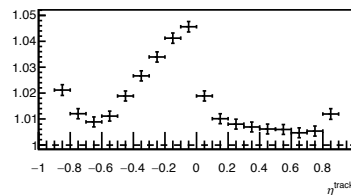
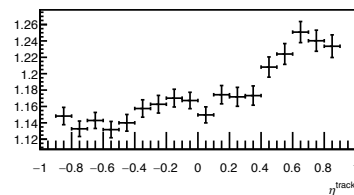
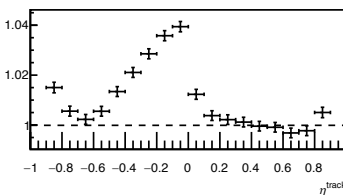
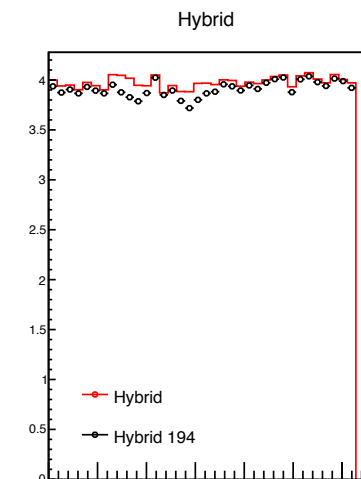
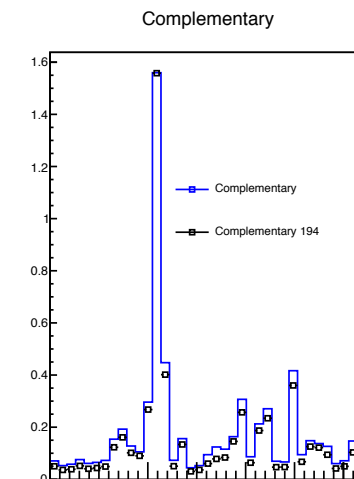
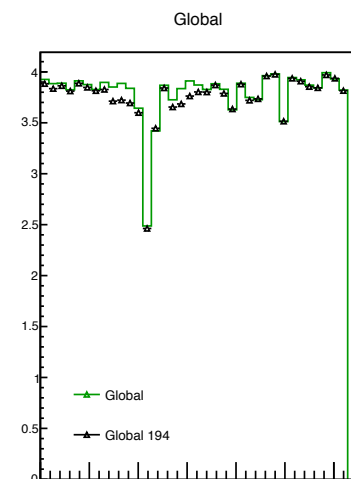
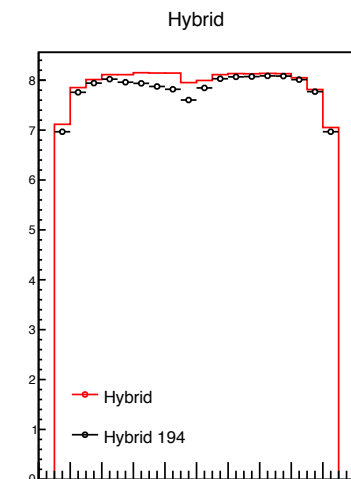
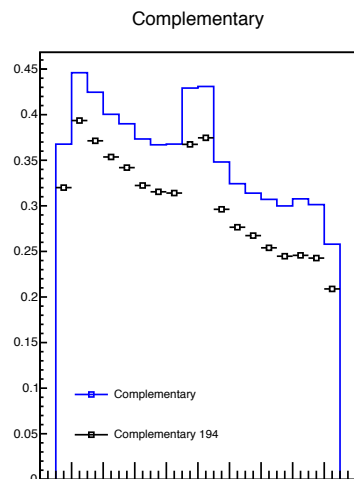
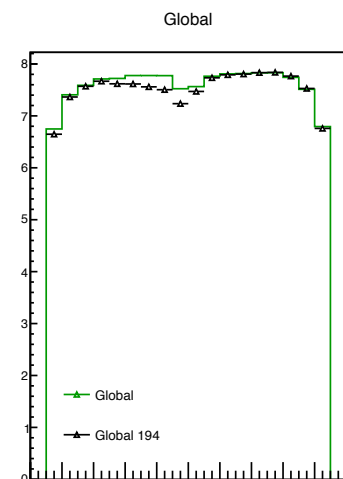


The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

50-80

High interaction rate

> 5.5 kHz



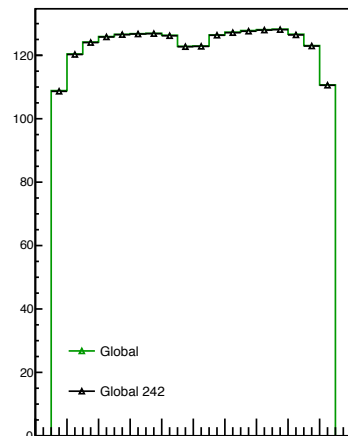
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. In the center, there is a red speech bubble with a white border. Inside the bubble, the text '00-10' is written in a large, white, sans-serif font. Below it, '242 VS 252' and '5,5kHz +' are written in a smaller, white, sans-serif font.

00-10

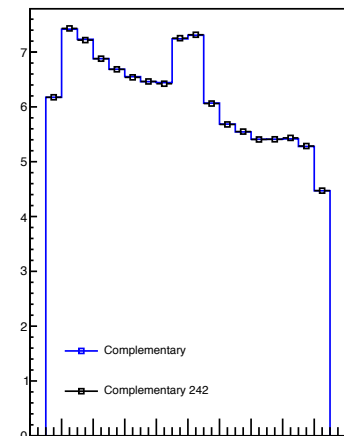
242 VS 252

5,5kHz +

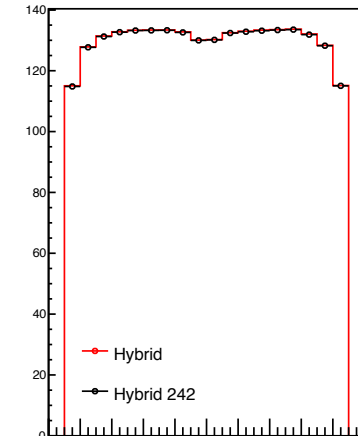
Global



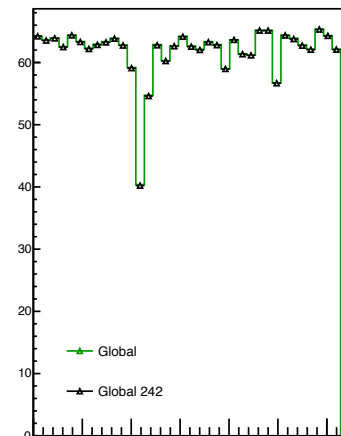
Complementary



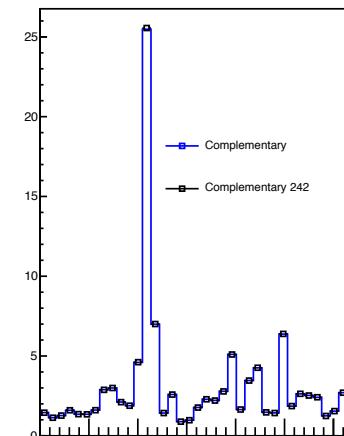
Hybrid



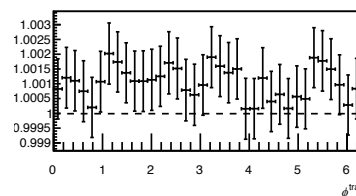
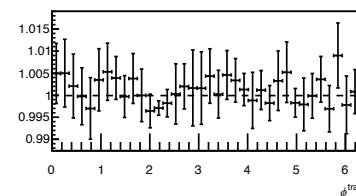
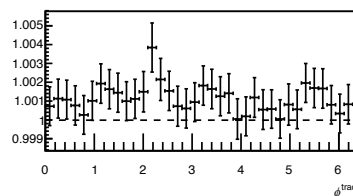
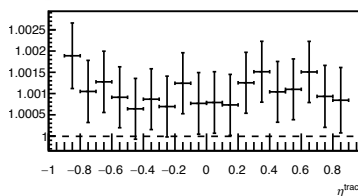
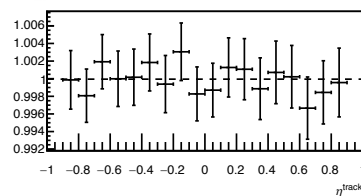
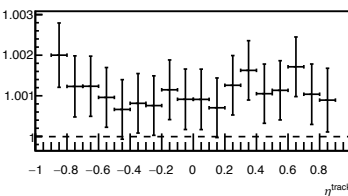
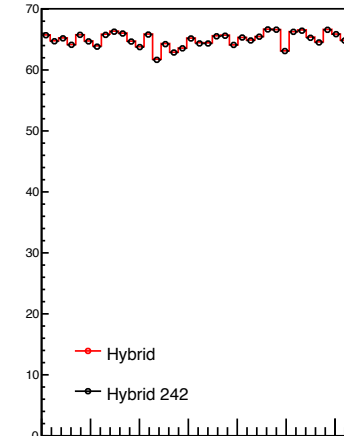
Global



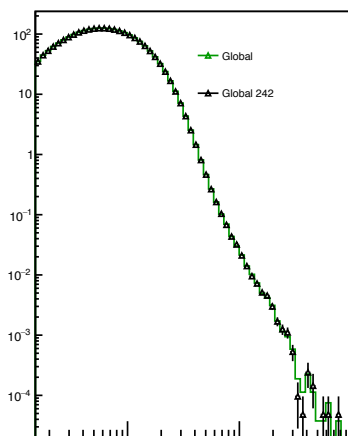
Complementary



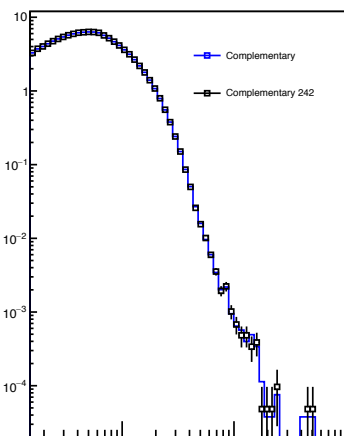
Hybrid



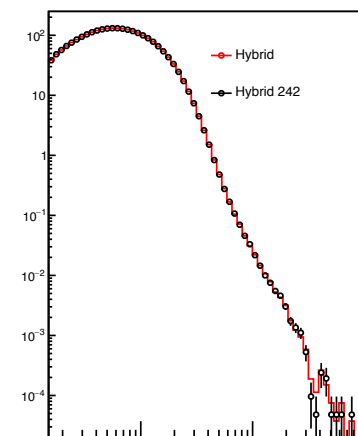
Global



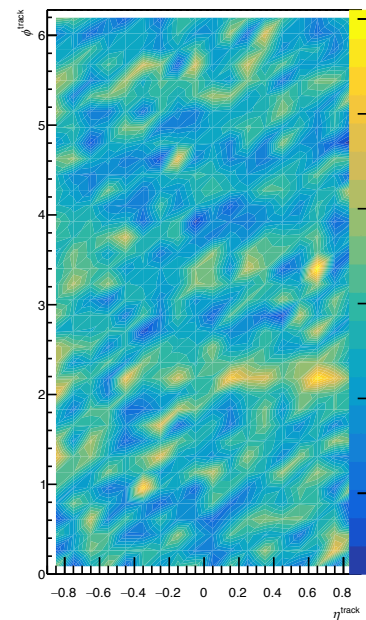
Complementary



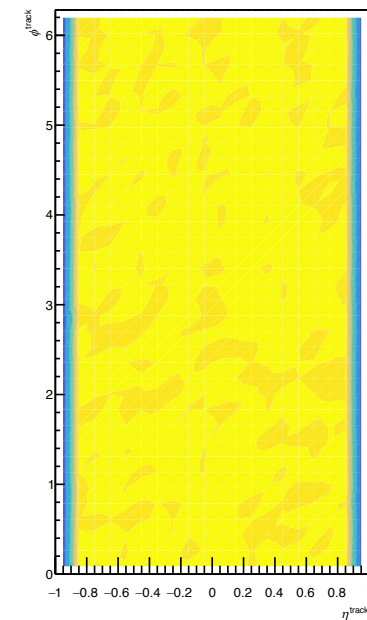
Hybrid



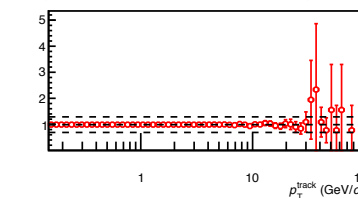
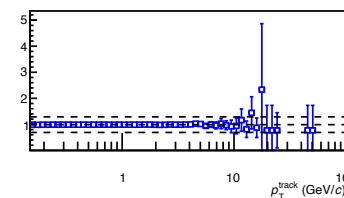
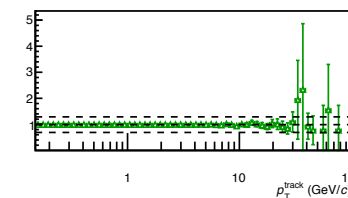
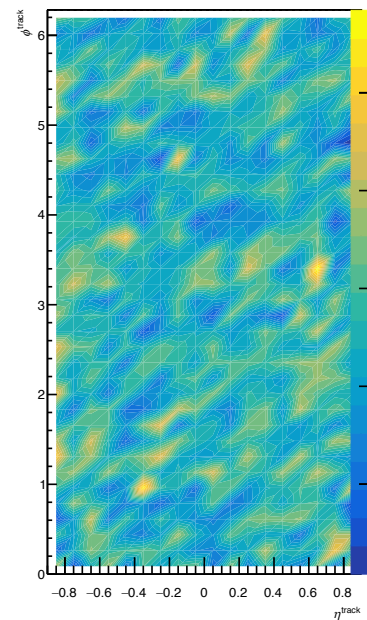
Global

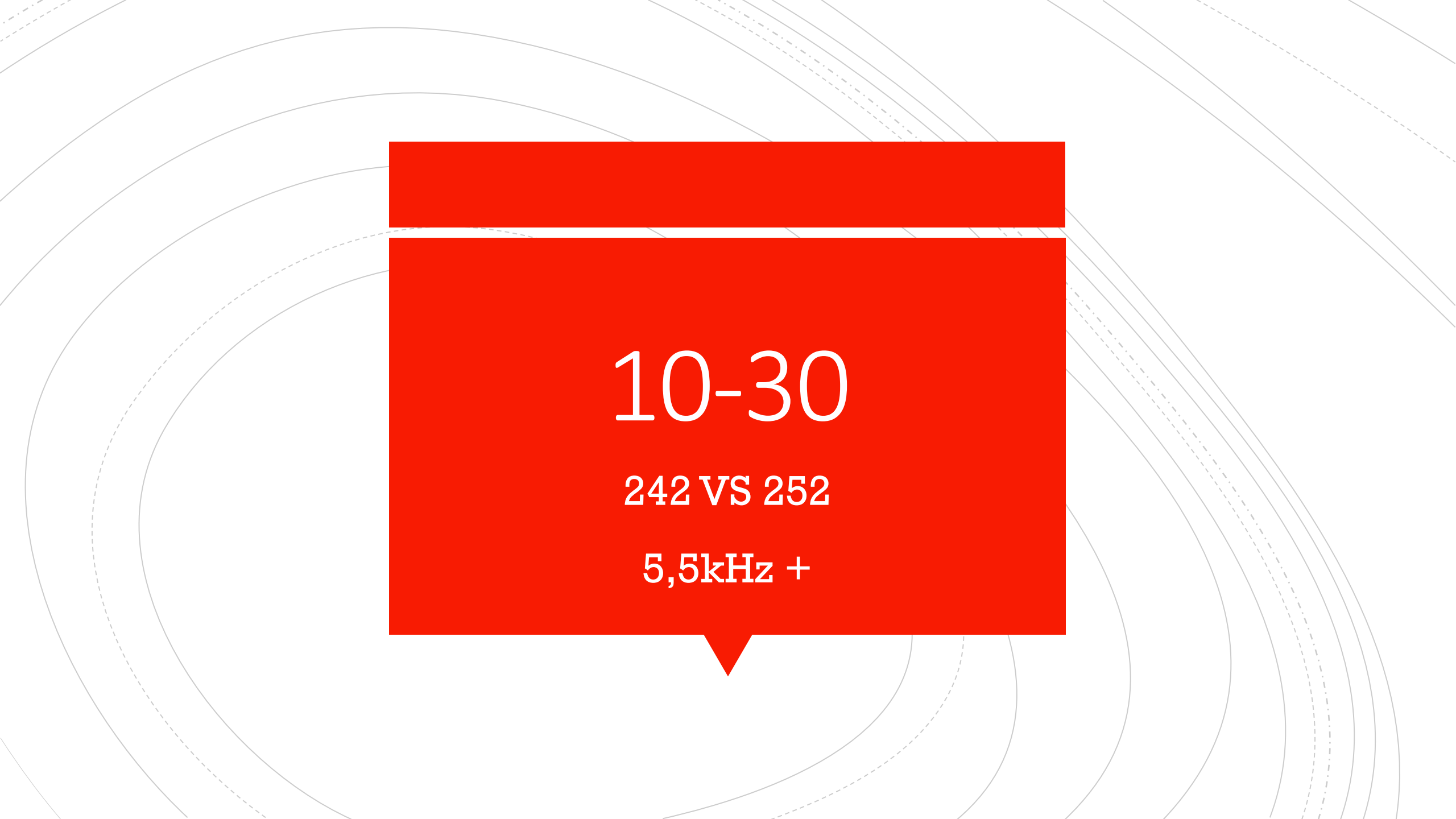


Complementary



Hybrid



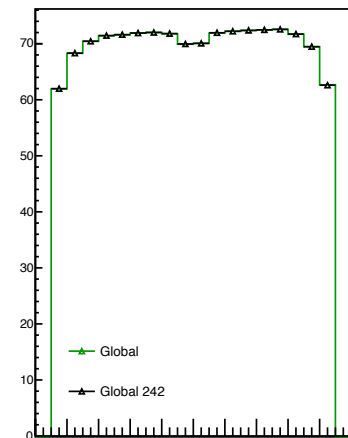
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A bright red callout box is centered on the page, containing white text. The box has a rectangular top and a pointed bottom.

10-30

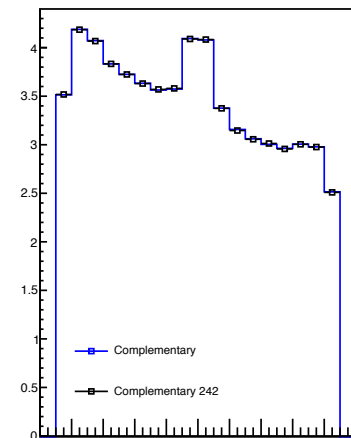
242 VS 252

5,5kHz +

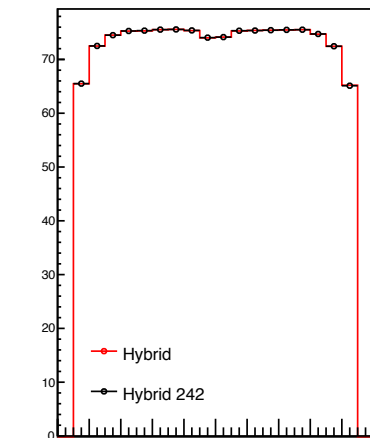
Global



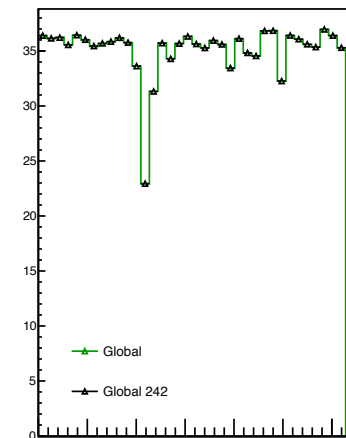
Complementary



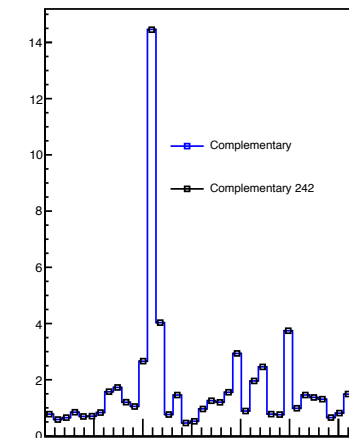
Hybrid



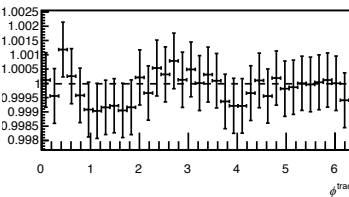
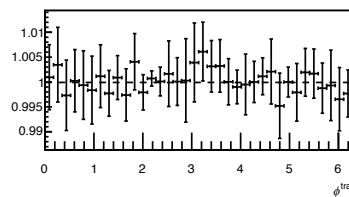
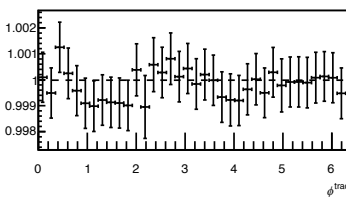
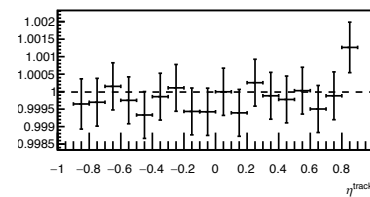
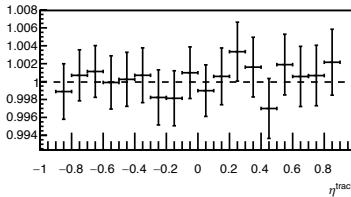
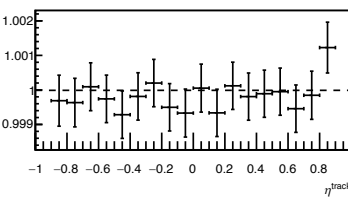
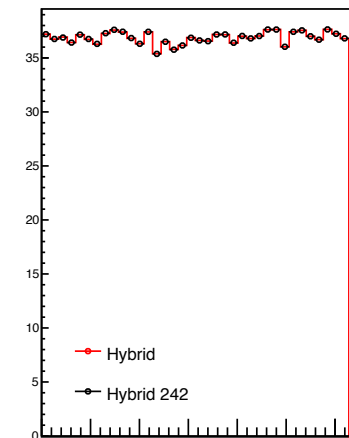
Global



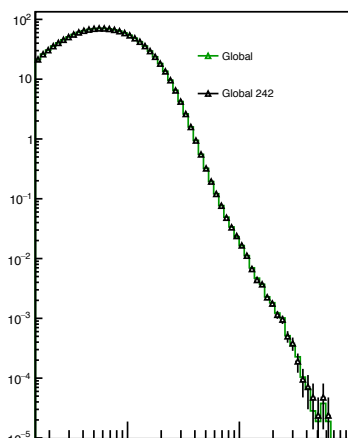
Complementary



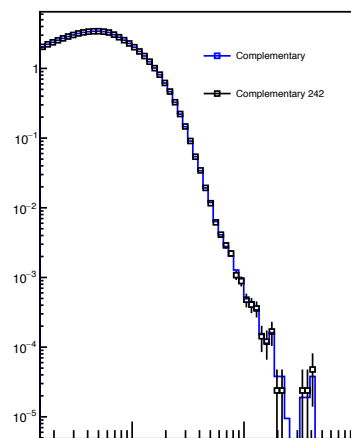
Hybrid



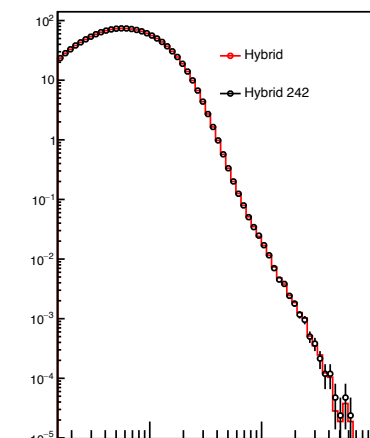
Global



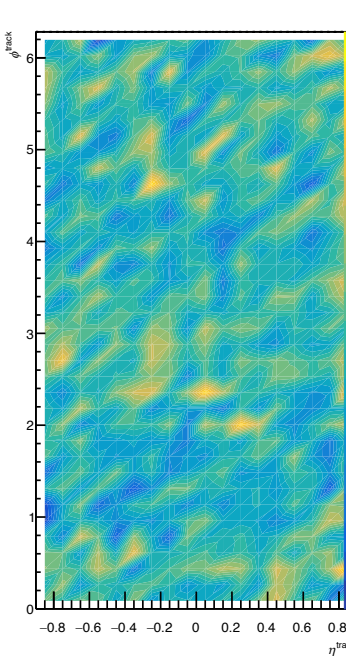
Complementary



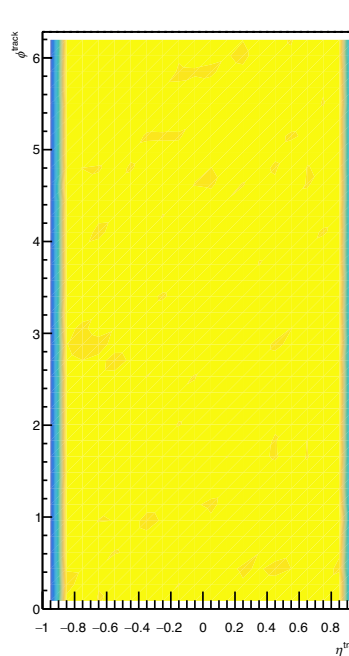
Hybrid



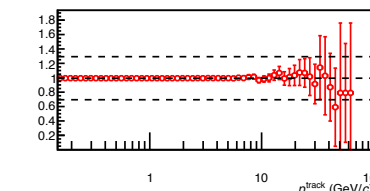
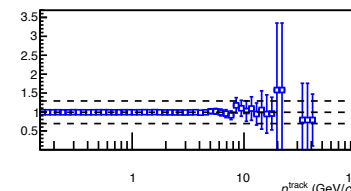
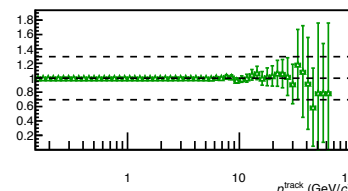
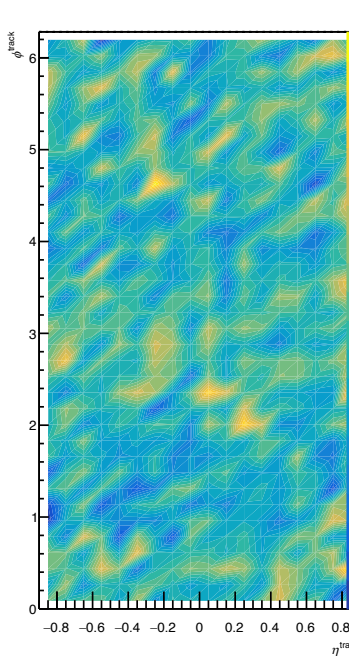
Global

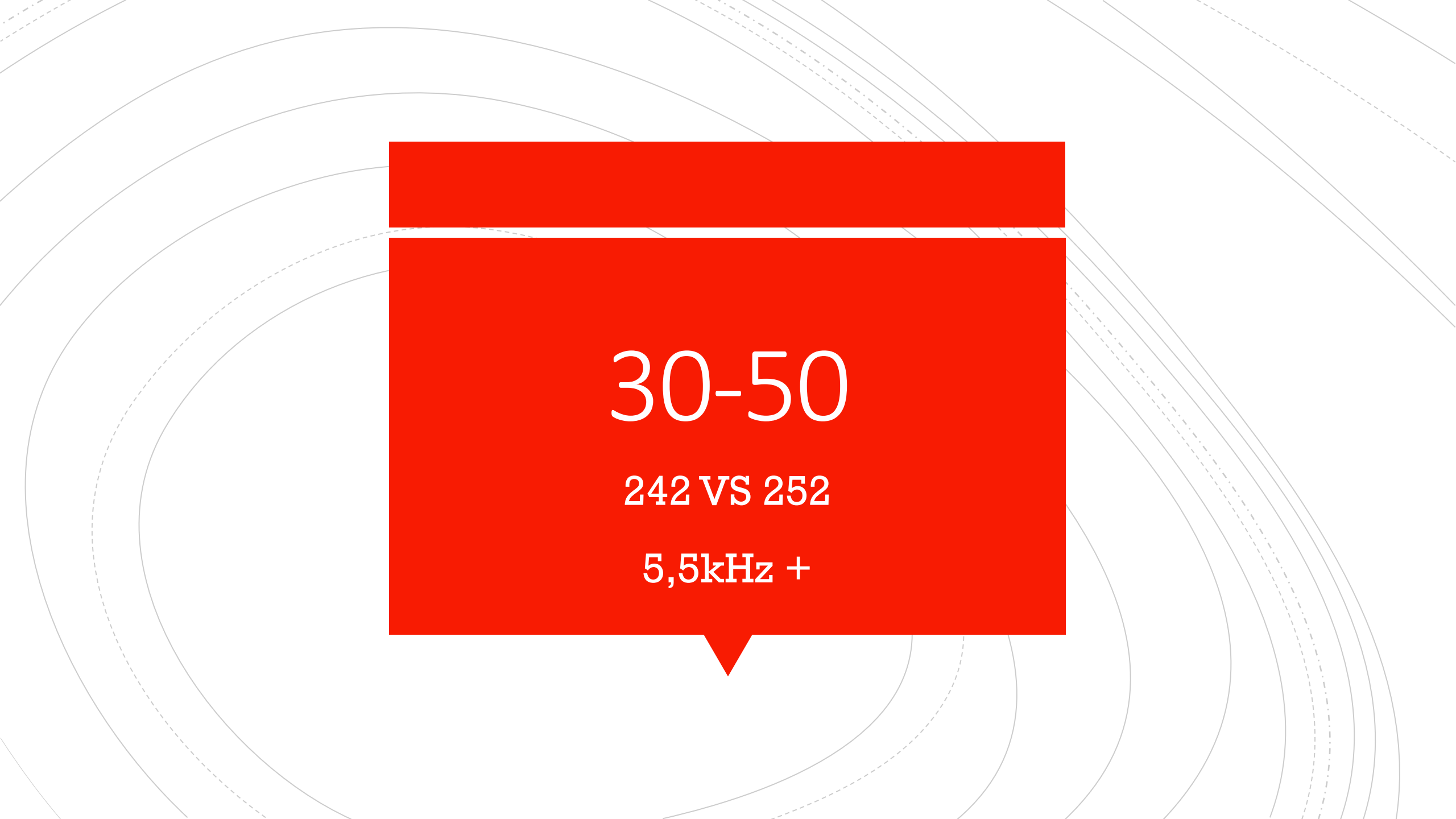


Complementary



Hybrid



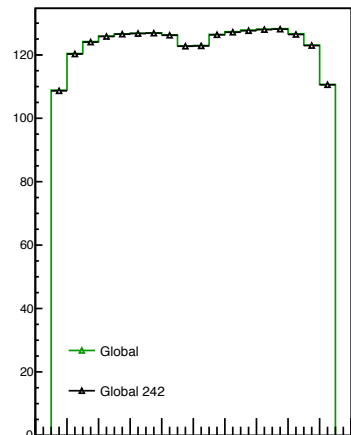
The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A red callout box with a downward-pointing arrow is centered on the page.

30-50

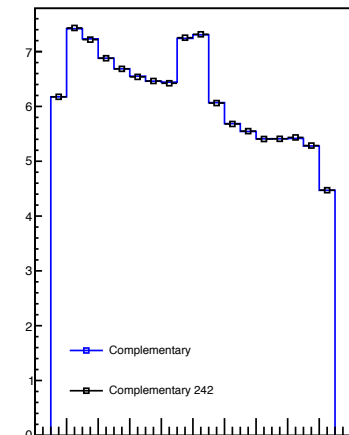
242 VS 252

5,5kHz +

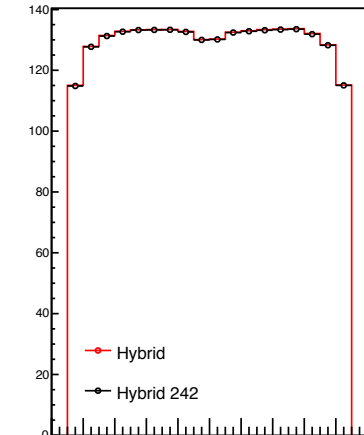
Global



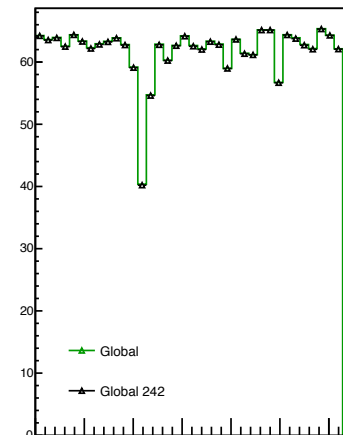
Complementary



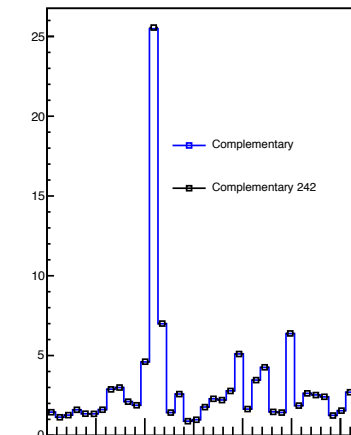
Hybrid



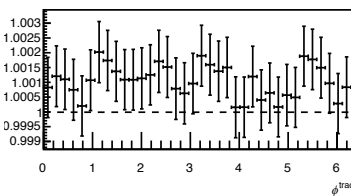
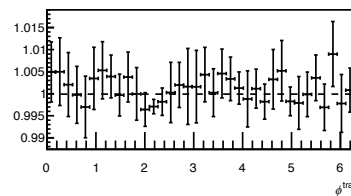
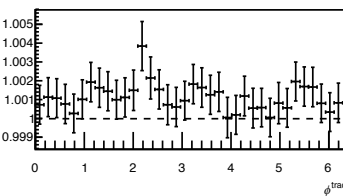
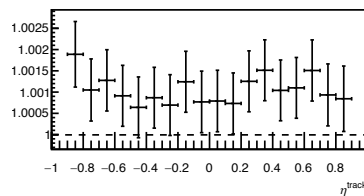
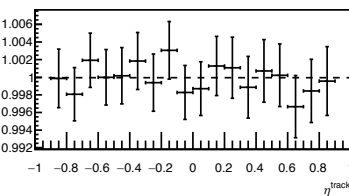
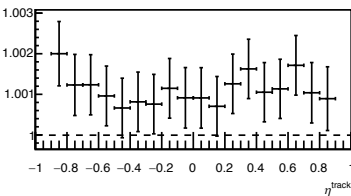
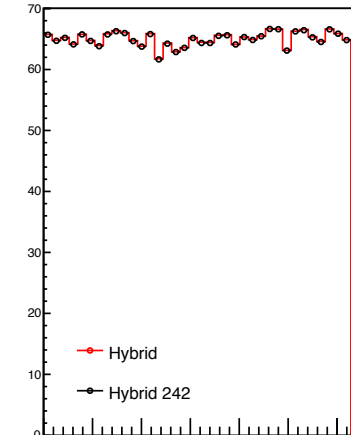
Global



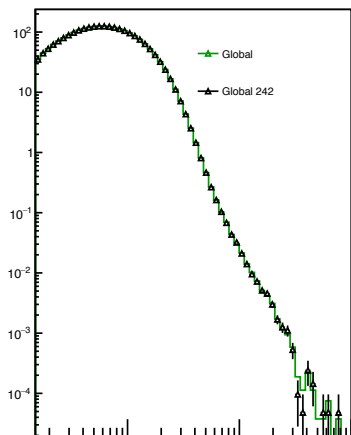
Complementary



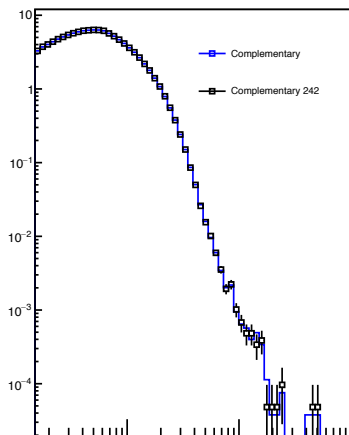
Hybrid



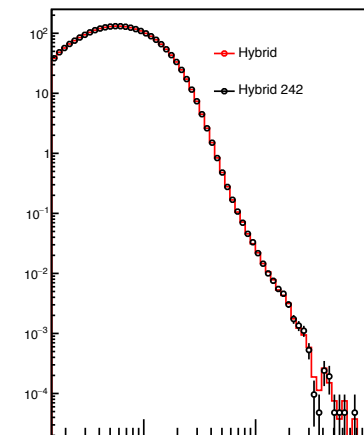
Global



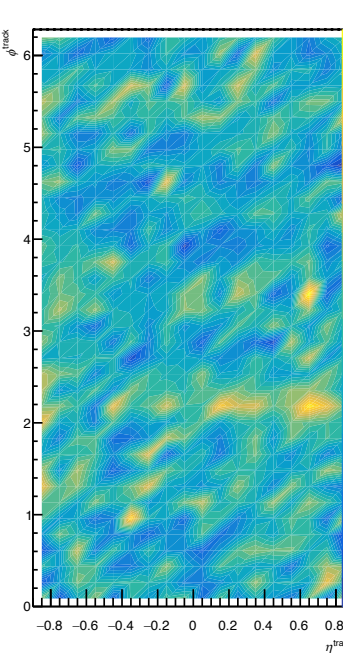
Complementary



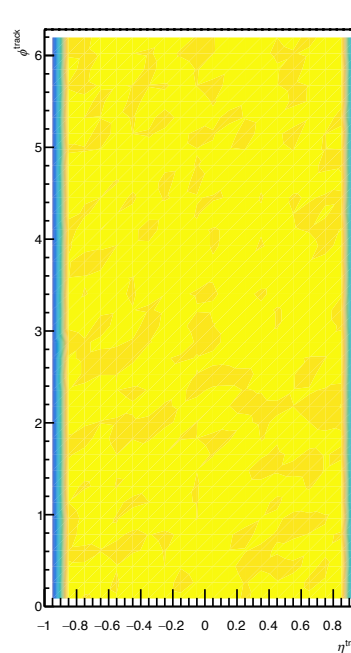
Hybrid



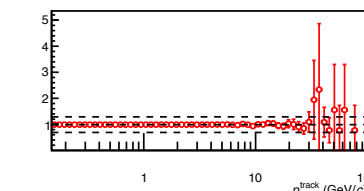
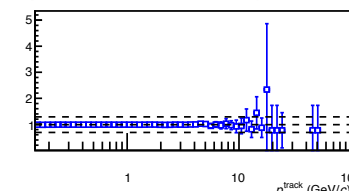
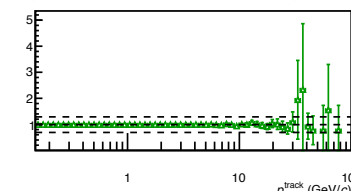
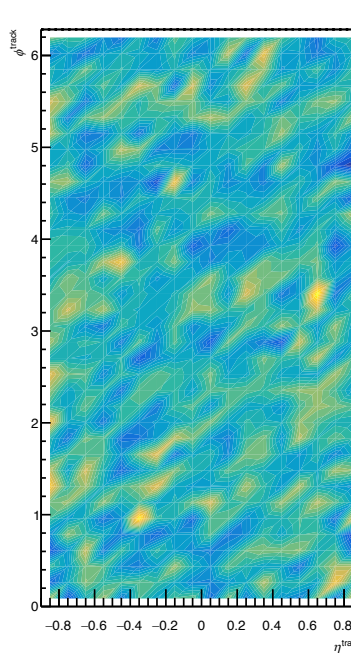
Global

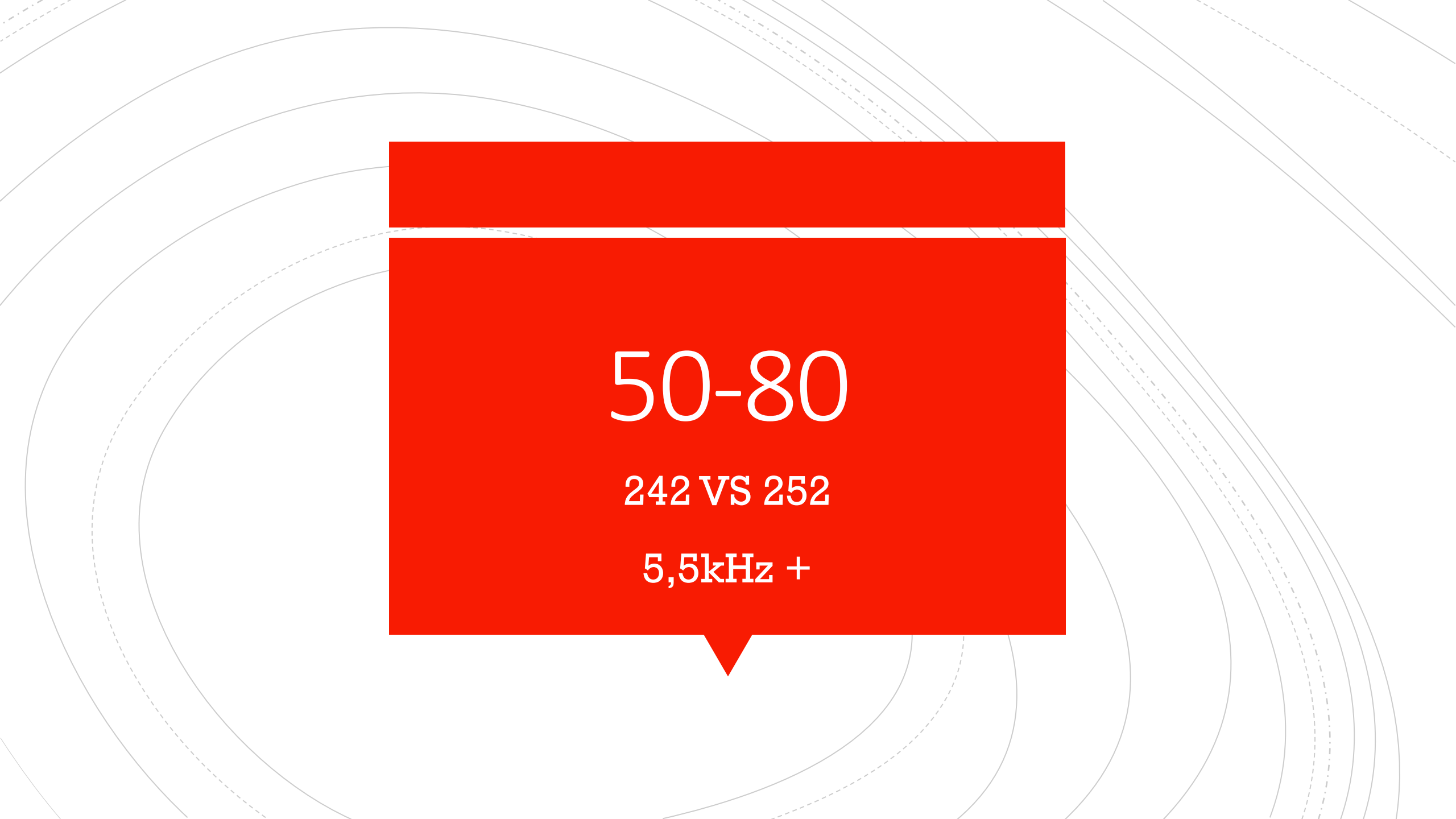


Complementary



Hybrid

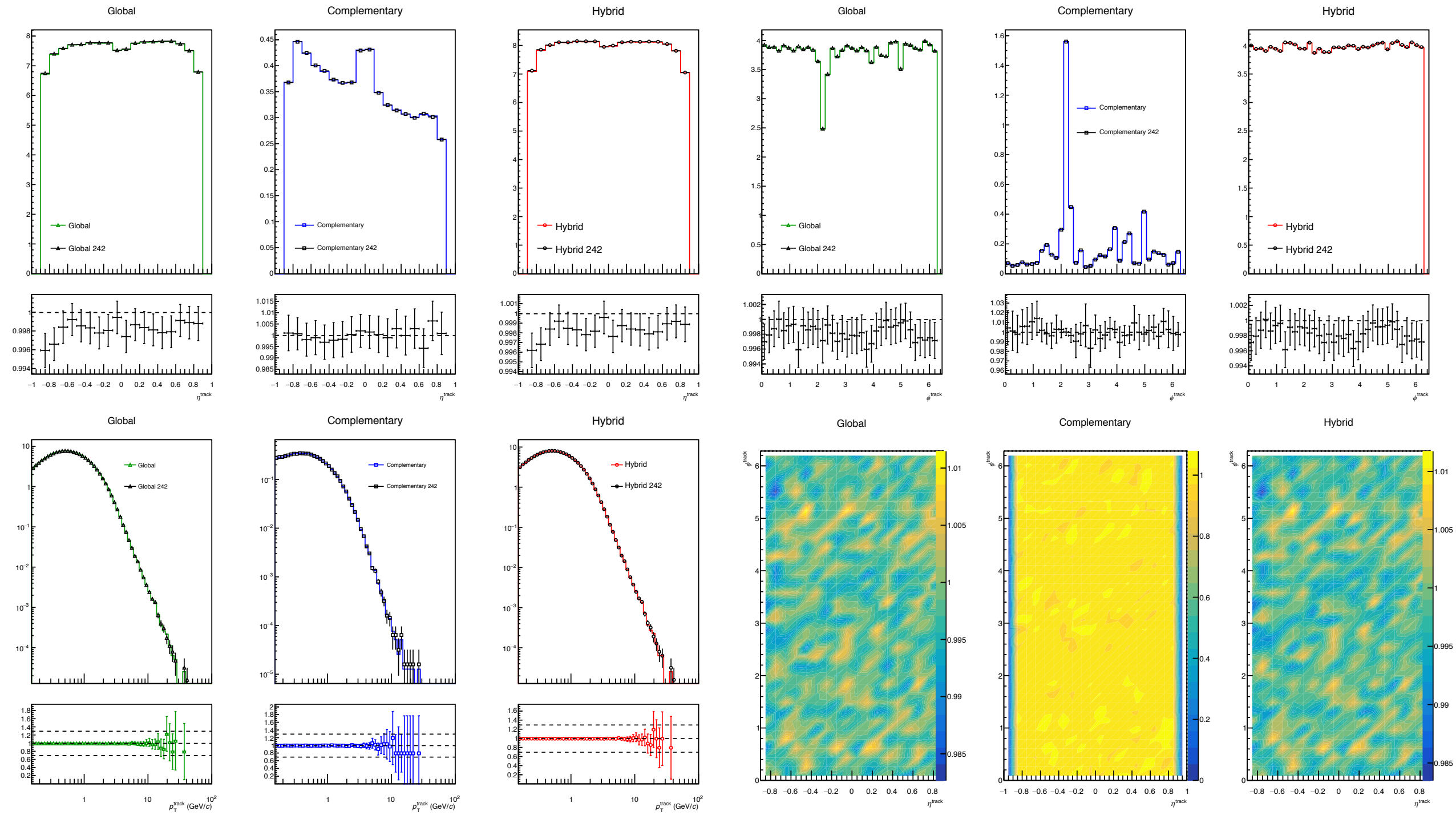


The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A bright red callout box is centered on the page, containing white text. The box has a rectangular top and a pointed bottom.

50-80

242 VS 252

5,5kHz +



Information

- For 2020 pass2 global run lists have been created including High Interaction Rate runs (HIR) and low Interaction Rate runs (LIR). All the fixes of the previous version have been applied when needed
- $\frac{\chi^2}{TPC_{Cl}}$ cut 4 $\Rightarrow$ 2,5
- 10 runs without ZDC5 runs in which ZDC cannot be trusted
- Central Barrel Tracking TPC incomplete acceptance: 2 runs 246676, 246675
- TOF: bad 245439, 245452, 245700, 245738, 246428, 246980 (electronics)
- T0: not present run 246390
- 19 runs: no EMC
- 29 runs: OK but part of the detector should be masked
- [https://twiki.cern.ch/twiki/bin/viewauth/ALICE/AliDPGRunList15o#Important Notes LHC15o](https://twiki.cern.ch/twiki/bin/viewauth/ALICE/AliDPGRunList15o#Important%20Notes%20LHC15o)
- MC :
<https://alimonitor.cern.ch/MC/?details=0&prodName=&jiraID=&anchorProdTag=LHC15o&anchorPass=pass2&collSystem=&energy=&generator=&pwg=&eventsRequested=&generatedEvents=&outputSize=&wallTime=&savingTime=&submitBt=%BB>

χ^2 Def

- χ^2 of TPC track For each reconstructed track in the TPC the χ^2 between the helix of the track and the clusters assigned of the track is calculated. Fake tracks typically have a much larger χ^2 than real well reconstructed tracks. In case $\chi^2/N_{clusters}$, TPC1 is larger than four the track is rejected.